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Has the Dämmerschlaf a Place in Obstetrics?

DAMMERSCHLAF WORTHY OF CAREFUL STUDY.

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The objection in this country to this treatment of labor cases lies, probably, not so much in the method itself as in the manner in which it has been brought before the profession of late. There is no doubt that the majority of obstetricians of this country, when their attention was drawn to the article in a monthly magazine, felt a certain resentment, because the entire article savored strongly of commercialism. It certainly was a bid for wealthy American pregnant women to go to Freiburg for delivery—painless, but not priceless.

The term "painless childbirth" is, in a manner at least, misleading. All of these patients suffer during labor, but forget about it afterwards. That is what we have now with the aid of morphin, chloroform, chloral, etc. All women soon forget the pain they suffer during the birth of their children. There is, however, something of merit in the Freiburg method. It ought to be well studied and carefully practiced. Those who can afford to employ a physician and necessary assistants, and who demand this treatment, should be accommodated. But the poor women will have to continue to suffer as in the past. This fact lends emphasis to the necessity of providing maternities where the poor women, when in labor, may enjoy the same benefits as the rich.

Among the cases reported at the recent meeting of the American Association of Obstetricians and Gynecologists, in Buffalo, it was impossible in some instances to obtain the desired effect of the drug, even after repeated doses were given. Dr. McPherson reported the case of a woman to whom he gave this treatment, and who proceeded to abuse him most emphatically and in well defined terms during the entire duration of the "Dämmerschlaf" before the birth of the child. However, later she had forgotten all about the pain and her conduct.

Personally, I am very much in favor of giving the Freiburg method a thorough test. I think there is something in it. If it is possible to reduce the suffering of labor, or render it altogether painless without risk to either mother or child, it behooves us to adopt the method.

The resentment shown this treatment by many of the obstetricians of this country was caused by the offensive, almost nauseating manner in which it appeared in the lay press. It was stated that women delivered in this manner gave birth to healthier babies—that the children were better looking, grew faster and were much stronger. What nonsense! Personally, I regard such publication as far beneath the dignity of a German—or an American—professor.

4 West 7th Street.

TWILIGHT SLEEP HAS A DEFINITE FIELD.

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Scopolamin-narcophin analgesia has a definite field in hospital obstetrics. In our experience at Long Island College Hospital we have found that the method is safe when each patient is individualized and the dosage is small. It is the morphine or narcophin which produces oligopnoea and asphyxia. The patient may be kept for hours in "twilight" in the proper surroundings with very small doses of scopolamin, i. e., 1/400 of a grain every three or four hours. The babies are not cyanosed unless repeated doses of morphin or narcophin are given.

The first stage is often shortened, and full dilation of the cervix is secured without pain to the mother. The second stage may be prolonged, and in this lies the danger to the child. The fetal heart should be constantly watched, and delivery resorted to when the second stage lasts over an hour in multiparae, two hours in primiparae, or earlier if the fetal heart is arythmic or very slow.

We have had no dead-born babies, or post-partum hemorrhages in our series. Analgesia and amnesia have been produced in over 90 per cent. of the labors—in 10 per cent. while pain has been relieved the woman has had a recollection of the events.

Those who are going to attempt the conduct of labor

under "twilight" should have considerable experience in obstetrics, and should have watched a number of "twilight" deliveries.

Adoption of the method will do much toward reducing obstetric morbidity if properly and intelligently administered. It is impracticable in private practice unless the practitioner is willing to remain constantly with his patient.

287 Clinton Avenue.

HAS THE DAMMERSCHLAF A PLACE IN OBSTETRICS?

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The answer to this question depends upon the answer to the following questions:

1. Is the method dangerous to the mother?
2. Is the method dangerous to the child?
3. Is the anguish and the pain of childbirth of such a degree to warrant alleviation?
4. If the method is not dangerous to the mother and to the child, is the difficulty of administering the method so great as to make it impracticable?

1. Danger to the Mother:

That the small and total dose of morphin used, .01 (1/6 gr.) is dangerous to the mother cannot be affirmed by anyone who respects his own opinion. That the initial dose of scopolamin, .00045 (1/160 gr.) may cause collapse has been asserted by Hocheisen—but the experience in Freiburg and elsewhere proves beyond any doubt that such a result is impossible if a stable solution of the drug is employed; and if the succeeding doses of the drug are employed with any regard to the reaction of the patient, there can be no danger.

There are some secondary effects of scopolamin that may be annoying—e. g., the thirst may be intense, the reddening of the face may be marked, the incoherent mumbling sometimes heard may frighten the family, the restlessness at times may be marked; the high degrees of these secondary effects are very unusual and are much overbalanced by the great diminution in the amount of pain felt by the patient; usually these secondary effects are negligible and of course in any case where they are very marked the induction of Twilight may be discontinued.

Opponents of Dämmerschlaf have made absurd claims as to the danger to the mother of the use of scopolamin; one of the most ridiculous of these is the criticism that the drugs produce puerperal insanity; this claim has been thoroughly investigated at Freiburg and proved to be unfounded; in fact, one of the leading psychiatrists of Germany has denied the possibility of scopolamin causing insanity and the drug is used in all the hospitals for nervous conditions in large doses.

2. Danger to the Child:

The opponents of the method lay great stress upon the dangers to the child, and with some reason. They claim that the drug is a poison to the child during delivery, that it interferes with the nursing ability of the mother, that it unfavorably effects the future development of the child, and that the second stage of labor is so prolonged that the child's life is in danger.

That the drug depresses the respiratory centre of the child cannot be denied; that this depression is dangerous if too large doses have been used must be admitted; however, with a proper technique and a proper solution of the drug, the depression is so slight as to work only to the advantage of the child in that aspiration of liquor amnii is prevented and the child is born crying lustily.

In a properly conducted Twilight where individualization is used, the child is born without apnoea and without oligopnoea—(provided, of course, there are no independent obstetrical conditions that might be the cause of such apnoea); these good results should not be expected if a routine treatment be used.

The investigations carried on at Freiburg prove that neither the nursing ability of the mother nor the future development of the child is affected adversely; the objections to the method on these grounds have no basis of fact.

There is some danger to the child from prolongation of the second stage of labor—whether the Dämmerschlaf be used or not; and of course the obstetrical indications for interference at this time are identical whether the patient is in Twilight Sleep or otherwise; in other words, the obstetrician should remain an obstetrician even if scopolamin be used. That there is a prolongation of the second stage of labor must be admitted by those who have had experience with the method of Twilight Sleep; this retardation, however, is generally slight if a proper technique has been followed; if too large doses of the drug have been used we may expect trouble in the second stage. In all cases we must watch the labor much more closely than if no drugs are used.

We may sum up and say that there is distinct danger to the child in Twilight Sleep unless a proper technique is employed; but when the drugs are used properly and when the patient is treated from an obstetrical point of view there is no danger to the child in the use of Dämmerschlaf.

3. It has been said that the pain of childbirth is soon forgotten and therefore no care should be taken to diminish the anguish. While it is true that a few women suffer very little, the large majority suffer considerably and a few very much. Many of these, it is true, soon forget their trials but there are many more to whom the repetition of the ordeal looms up as a terrible nightmare; and up to the present time I have never heard an obstetrician admit a wish to undergo such an ordeal himself.

In all branches of surgery infinite care is taken to diminish or abolish pain; this effort has reached such a point that we use local anaesthetics even in a patient under general anaesthesia. Why should all the advantages of painlessness be thrown to the winds? Because, forsooth, labor is a natural process and woman must bear children whether she will or not.

The answer to the question whether the pain of labor justifies means for its alleviation lies in the condition of the mother after the ordeal is over; and anyone who will, without malice aforethought, compare the mothers who have had Twilight Sleep with those who have not had this aid, must come to the conclusion that the absence of the mental and physical exhaustion alone justifies the use of Twilight Sleep.

4. Is the difficulty of administering Dämmerschlaf so great as to make its use impracticable? The answer to this depends upon several factors. We must admit that the method does consume a great deal of the physician's time, because as soon as the injections are started the physician must remain with the patient until the labor is ended. During this time the different tests are made, the fetal heart is watched, and the future injections are given according to the patient's reaction. Again, the method requires, besides a knowledge of the scopolamin technique, a broader and more thorough knowledge of obstetrical forces and conditions than is in common use.

A physician in general practice in the country where the whole community depends upon him cannot give

sufficient time to a single case to properly conduct a Twilight Sleep. In larger communities and in cities the general practitioner may call upon professional friends to aid him in his general work while he is attending a labor. The specialist in obstetrics must have a central hospital where he may look after one or more cases of Twilight Sleep at the same time. There must be developed in the future private hospitals devoted to Twilight Sleep where a physician or a nurse who has been thoroughly trained in the Dämmerschlaf method may give the injections under the general direction and supervision of the patient's physician.

Since my return from Freiburg in the summer, we have given to every patient in labor at Gouverneur Hospital when the treatment was indicated the Dämmerschlaf and while this has required considerable more attention of the staff physicians and nurses, we feel justified in devoting sufficient care to these cases because of the excellent results obtained both for the mother and child.

We may say that under the proper conditions the method is practicable and the difficulties are to be met by training physicians or nurses in the special method and by the establishment of central hospitals for these cases.

So we may maintain that Dämmerschlaf has a place in obstetrics; a place that will become larger as the method in its proper form becomes better known and as the development of suitable hospitals provides a haven where patients may be properly cared for; Dämmerschlaf, because of the increased care necessary for its induction, will therefore raise the general standard of obstetrical knowledge; the physician who is not interested in obstetrics as a scientific branch of medicine will give way to one who undertakes a labor case with the same thoughtfulness as one would give a major operation.

Dämmerschlaf has not only a place in obstetrics but it will be a strong factor in lessening the number of artificially induced abortions because there will be a lessened fear of motherhood; it is also not unreasonable to assume that there will be an increase in the number of children of the intelligent families. And just as anaeshthesia and asepsis have been the great factors in the advancement of general surgery, so may Dämmerschlaf and asepsis be the great factors in the approach to that millenium which is attainable according to the Shavian School only through the conscious endeavor to produce the greatest number of the best offspring.

59 West 54th Street.

MODIFIED TWILIGHT SLEEP WITH SPINAL ANESTHESIA.

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I had an opportunity to witness a confinement in twilight sleep at the clinic in Freiburg two years ago. My impression was not sufficiently favorable at that time to induce me to adopt the method. Since then, a simplified technic has been published by Dr. P. W. Siegel, one of Krönig's assistants in Freiburg. However, I have, as yet, no practical experience with the method and am speaking only from a theoretical standpoint. I believe that any *safe* method of reducing the pain of birthpangs is justifiable. I do not go so far as some authors who suggest cesarean section in normal cases in order to obviate the racking physical and mental strain of physiological labor, but I hold that the sufferings of parturient women demand more than the consolation of Biblical references. Whether or not the twilight sleep represents the ideal method I am not yet prepared to say. I would not mind giving one, two, or even three injections of scopolamin and narcophin, but I would hesitate to repeat these injections ten, twenty, and even twenty-seven times, as Siegel has done.

In gynecologic operations under spinal anesthesia I have repeatedly induced a light twilight sleep by two preliminary injections of scopolamin and narcophin and have been satisfied with the effect upon the psyche of the patients before and the diminution of wound pain after the operation.

Metropolitan Building.

DAMMERSCHLAF DOES NOT INTERFERE WITH LABOR.

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The scopolamin-narcophin anesthesia in labor has been in use in the University Frauenklinik of Freiburg for eight years and for a couple of years in the University Frauenkliniks of Tuebingen, Heidelberg, Munich and in the Medical Academy of Duesseldorf. I think that is a sufficiently good argument in proof that the method has no danger for mother or baby, which is after all the first point we have to consider in any medical treatment.

One advantage of this anesthesia is that it does not interfere with the labor. If the second stage is really prolonged, this disadvantage is offset by the fact that the first stage is surely shortened.

A very important advantage of the Dämmerschlaf is to be found in its psychological effect on the mother before and after childbirth. Women of to-day with their hypersensitive nervous systems are, as Professor Krönig says, far removed from being natural, and therefore we can no longer look upon their labor pains as being physiological. The best proof for this is that out of a hundred women who are in labor ninety used to ask for chloroform, and are asking now for twilight sleep.

With the right technic and by individualizing every case we may be sure to help our women over their hour of trial without danger, and we will have obliterated their fear of childbirth, a very important factor in its bearing upon race-suicide.

86 Madison Avenue.

DAMMERSCHLAF NOT FOR GENERAL USE.

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The drugs used in producing the twilight sleep carry inherent dangers which have not been completely eliminated, even in Freiburg. The general re-employment of the method—discarded ten years ago and again seven years ago—will result in the repetition of the bad experience of those times. Practiced by specialistically trained obstetricians, in a specially equipped maternity hospital, with an abundance of trained assistants and nurses, the dangers to mother and child may be reduced to bring them to a point where one may well consider the advantages and disadvantages to more nearly balance each other. Even under these circumstances one will have to reckon with a certain toll of infants' deaths and injured mothers. For general use—especially in the home—the drugs are contra-indicated.

DAMMERSCHLAF HAS A LIMITED PLACE IN OBSTETRICS.

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Philadelphia.

From my personal experience with scopolamin-morphin anesthesia in obstetrics in 1906, when it was being used quite extensively in our hospitals as the anesthetic in general surgery, and again quite recently, I am forced to the conclusion that the Dämmerschlaf has a very limited place in obstetrics. In 1906 it was used routinely as the anesthetic in a series of cases, but finally almost wholly abandoned because of the unpleasant effects and after-effects—mental and otherwise—on the mother or baby or both in about 75 per cent. of the cases. Since then and until recently, its use has been limited largely to the one dose, preliminary to some other anesthetic in operative obstetrics. Since the widespread notoriety given to the method, and because some expectant mothers want it, we have again been prompted to adopt it, by way of experimentation, and observe what was originally observed, viz.: That the results were very satisfactory in a small percentage of cases, with whom the labor was progressively active, when both the involuntary and voluntary forces were vigorous and little or no resistance existed to interfere with the normal termination of the labor. The one dose—morphin 1/6 and scopolamin 1/100—is also valuable in dystocia, given preliminary to the administration of ether or chloroform, when the labor is soon to be terminated by instruments or section, under which circumstances the amount of ether or chloroform may be reduced one-half.

The method appeals to the average expectant mother, because of its painless nature, together with the fact that she has little or no knowledge of when the child is born, contrasted with the ordinary pangs of childbirth, as she realizes it in the absence of an anesthetic.

The objections are that the woman passes through a physiologic process in an unphysiologic manner; in a doped condition, rather than a beautifully described state, "Twilight Sleep," and while she is not wholly aware of what has been going on, in numerous instances, two or three persons are required to keep her in bed, or certainly in the proper position during the contractions. This is especially true with those who have special idiosyncracies to the drugs, and they are not a few.

Following the regular technique, except in the vigorously active—the type of individual previously described—labor is prolonged from three to six hours. The contractions under its influence vary in different individuals. With one they are simply rendered less efficient and the labor is prolonged, while another will manifest a low state of delirium and wildness, with spastic and irregular contractions, undoubtedly due to the susceptibility to scopalamin.

When the full three doses have been administered, not an infrequent occurrence is evidence of transmission to the child, with twitchings and stupor lasting from twenty-four to thirty-six hours.

The anesthetic ought to be well selected following a careful study of the individual. The Dämmerschlaf has a limited place, but should not be used routinely. With ether and chloroform the effects are soon over, moreover, if contraindications arise, they can be discontinued. Not so with drugs once administered by injection.

Very recently I was called upon to deliver a woman who was practically pulseless from exhaustion with uterine inertia. The doctor was considering scopolamin-morphin and I was tempted to use it, but decided to use spinal anesthesia with novacain. The stimulation given the uterine muscles was such that in fifteen minutes the labor was over with scarcely time to apply forceps, with absolute freedom from pain and stupor.

Like the Dämmerschlaf, spinal anesthesia, too, has a limited place in obstetrics.

3540 No. Broad St.

DAMMERSCHLAF NOT A ROUTINE PRACTICE.

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Philadelphia.

I have given up the Dämmerschlaf in obstetrics after trying it twice, for the following reasons:

If sufficient morphia is used to narcotize the patient, there is too much danger of inertia; too much danger of hemorrhage in the mother and asphyxia in the baby. I have seen the process in operation at Freiburg, in addition to trying it myself and feel that the action of the other German clinics in not adopting it, is quite justified.

If the method really represented the advantages claimed for it in the Freiburg clinic, it would at least have been adopted in all the other German clinics, even though its use had not spread to the rest of the world.

There are individual cases in which morphia and scopolamin are indicated and other obstetricians of experience have employed these remedies occasionally, for years past, but as a routine practice it is not to be recommended.

1521 Spruce Street.

DAMMERSCHLAF FOR THE OBSTETRICAL EXPERT ALONE.

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Dämmerschlaf apparently has a place in obstetrics, though a very limited one. It should be used only by those who are expert first in obstetric practice and second in the physiological action of the powerful drugs employed, especially when administered to women in labor.

It demands careful, continuous and tedious observation on the part of the obstetrician and an isolation of the patient and attendants away from family, which latter, from the standpoint of obstetrical cleanliness, might always be advantageous. I believe, too, it endangers the welfare of the infants.

815 Connecticut Avenue.

SATISFACTORY IF TECHNIC IS GOOD.

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I can see no objection to the use of the Dämmerschlaf in well regulated hospitals or maternity institutions, provided always the technic of administration as given us from the Freiburg clinic be strictly adhered to.

Movable kidney will occasionally be found in young children.

General Scientific

AN EXAMINATION OF DEATH-RATES FOR CANCER AND FOR CHRONIC NEPHRITIS.

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In the *Ladies' Home Journal* for May, 1913, Mr. Samuel Hopkins Adams asserted that cancer "seems to be increasing in a startling ratio" . . . "local figures almost without exception indicate a startling growth. The next census may well show an appalling increase. Latest comprehensive reports from England show that out of every eight women who attain the age of thirty-five years, one is slain by it (cancer); one out of every eleven men."

In the United States registration area, which in 1910 included 58.3 per cent. of the population of continental United States, the crude death-rate for cancer was 76.2 per 100,000 of population (in 1910). In 1911 the registration area included 63.1 per cent. of population, and the crude cancer death-rate for that year was 74.3 per 100,000. For 1912 the rate was 77.0. Mr. Adams' alarmist views are not held by many statisticians who have studied the figures showing the alleged increase of cancer with great care. The English work of Newsholme and King, published in 1895, indicates very plainly that up to that year the so-called increase of cancer in England was much more nominal than actual, and, referring to the United States, Walter F. Wilcox, professor of economics in Cornell, in June, 1913, made the following statement (*J. A. M. A.*, June 21, 1913, p. 2021):

"Statistics have become much confused between cancers and tumors . . . In view of all the statistical evidence I am inclined to hold that the increase of the mortality from cancer is apparent rather than real. I believe, further, that those who doubt this conclusion, and think that most of the increase is real, may interpret the evidence as showing that the real increase is slackening, and that, perhaps, in certain limited areas it is already approaching its maximum." Prof. Wilcox is a trained statistician, and is neither a surgeon nor a writer of sensational magazine articles. Almost all alarmist assertions concerning the remarkable increase of deaths from cancer emanate from surgeons or from writers for popular magazines who consider it their duty—at least, so they say—to warn the public of the danger and risk of becoming cancerous. As the cause of cancer is unknown, all they can do is to urge people to consult a physician as soon as any pathological symptoms appear on or in their bodies, and to have warts and moles removed. For many years all intelligent persons have given attention to these matters, and the unintelligent, except a few who delight in unclean tales and attacks upon the "interests," do not read magazines.

Mr. Adams' predecessor in unnecessarily alarming the uninitiated, was a Cincinnati surgeon—Dr. Charles A. L. Reed, who (*Lancet-Clinic*, June 9, 1909, p. 626), wrote that cancer was causing more deaths in the United States than any single disease except tuberculosis, and that "if present tendencies are permitted to continue"—whatever that may mean—"in less than ten years" the positions of tuberculosis and cancer "in the death-dealing category will be reversed." This idea has been so persistently exploited that a considerable percentage of the physicians of the country appear to have accepted it as accurate. That two diseases—all forms of pneumonia and chronic nephritis—cause more deaths than cancer seems to have escaped attention, probably because the medical profession and, of course, the public, are always willing to believe whatever any well-known surgeon may say on almost any subject connected with disease, health or hygiene, although the connection may be remote. No reason has ever been given why surgeons should be regarded as authorities upon cancer statistics or upon any other aspect of mortality statistics. Nevertheless, whenever a surgeon favors the profession or the public with his opinion that deaths from a certain disease are increasing or decreasing, that opinion is seldom challenged, although vital statistics are more closely connected with mathematics than with surgery, and although mathematical knowledge is not an essential part of a surgical education.

The figures which follow explain themselves. No reliable statistics exist of deaths or death-rates of those parts of continental United States which are outside the registration area. In 1901, the estimated population of continental United States was 77,747,402; in 1909, 90,691,354; in 1911, 93,927,342; in 1912, 95,545,336.

	1901.	1909.	1910.	1911.	1912.
Per cent. of population included in U. S. registration	40.3	56.1	58.3	63.1	63.2
Total deaths from diseases named in U. S. registration area:					
Tuberculosis—all forms	61,599	81,720	86,309	94,205	90,360
Pneumonia—all forms	50,609	70,033	79,524	79,233	51,495
Chronic nephritis	25,507	43,412	46,665	51,847	55,865
Cancer	20,171	37,562	41,039	44,024	46,531

As is well recognized, cancer is a disease which is more common among women than men, and it is also more frequently met with in middle-aged and elderly persons than in the young. In order, therefore, to determine whether deaths from cancer are increasing more rapidly than the increase of population would justify, "correction" of death-rates for age and sex constitution of the area concerned is absolutely necessary, and this procedure is merely the first step toward arriving at an accurate conclusion. In the United States, however, the Government has only recently begun to publish "corrected" death-rates, and comparison of crude death-rates proves very little because age and sex constitution may change materially in a very few years. "Correction" of death-rates is unfortunately a long and tedious process in which the standard employed is the average age and sex distribution of the area concerned, or else some standard adopted in European countries. The crude cancer death-rate for 1911 for the States included in the registration area in 1900 is unquestionably higher than it was in 1901, but, for the reasons already given, little attention need be paid to this condition alone. Moreover, cancer being chiefly a disease of persons who are comparatively elderly, deaths from it must necessarily be more numerous than they were when the average length of life was shorter than it is to-day. An increase of cancer mortality due to this cause would not indicate any increased liability to cancer, although the crude death-rate would be higher. Further, about seventeen years ago, Mr. Roger Williams of Preston, England, a high authority upon cancer, not upon statistics, expressed an opinion founded on a study of his own cases, that many people who now die of cancer, had they lived prior to Koch's discovery of the cause of tuberculosis, would have died of the last-named disease before reaching the cancer age. Nobody is likely to deny the assertion that, chiefly as a result of the process of natural selection, acute phthisis has ceased to be a common cause of death. (Williams, *Brit. M. J.*, Aug. 8, 1896, p. 318.)

The Census Bureau has "corrected" the cancer death-rate for the years 1901 and 1911 according to the English standard (for 1901) for those states which were in the registration area in 1900, viz.: Connecticut, District of Columbia, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Rhode Island and Vermont. "Employing the corrected rates based upon a standard distribution of population by sex and age, cancer increased just one-fourth (25 per cent.) from 1901 to 1911. The increase for males (30 per cent.) was somewhat greater than the increase for females (22 per cent.)" (Mortality Statistics, 1911, Bulletin 112, p. 31.) Attention is now drawn to the following quotation from page 30 of the same Bulletin: "The marked relative decrease of the death-rates of females above the age of thirty-five years (from tuberculosis) may be compared with the increase at those ages of the death rates from cancer." Lack of space, however, prevents reproduction in this place of the tables referred to. The increase of 25 per cent. in the nominal cancer death-rate in ten years does not appear to me phenomenal or alarming. It—an apparent increase of two and a half per cent. per annum—may be due to two causes, viz.: increased care in death certification, and the tendency to regard all tumors as cancers. For statistical purposes—that is, in order to determine whether the standard (corrected) death-rates for all malignant tumors is appreciably increasing or not—scientific classification of cancers into carcinomata, sarcomata, etc., is worse than useless; it befogs the issue. So long as this method is adhered to for statistical purposes, few experienced and impartial statisticians are at all likely to accept so-called increases in the cancer death-rate as necessarily correct. For a number of years accurate diagnosis of cancer on the outside of the body has been comparatively simple, but correct diagnosis of internal cancer, when no autopsy has been held, which is very often the case, is still far from simple. For statistical purposes, therefore, deaths from cancer should, for the present, be divided into external and internal, and all death certificates which give cancer as a primary cause of death without the site of the neoplasin being mentioned, should be discarded on the ground that doubt exists as to the case being necessarily one of cancer. In this city, Buffalo, almost any symptom can be registered as a primary cause of death. At this moment I have before me a certified copy of a death certificate dated Oct. 19, 1912, in which the primary cause of death appears as "neurasthenia" and the contributory cause as "paralysis of heart."

Returning for a moment to Dr. Reed's prediction that in ten years from 1909 the positions of tuberculosis and cancer as causes of death will be reversed, the figures given below suggest that the Cincinnati surgeon who made this prophecy had not studied the statistical aspect of deaths from cancer very thoroughly.

	1909.	1910.	1911.	1912.
Percentage of population of continental U. S. included in registration area	56.1	58.3	63.1	63.2
Crude death-rates per 100,000 of population for diseases named:				
Tuberculosis—all forms	160.8	160.3	158.9	149.5
Cancer	73.8	76.2	74.3	77.0

Cancer is not the only malady which may have a higher crude death-rate than it formerly had, to some extent as a result of the average duration of life having lengthened. The proportion of deaths registered as due to chronic nephritis has apparently increased considerably in the registration area of late years, but, as in the case of cancer, the increase may be much more apparent than real. The average age at death from chronic nephritis is now (in the United States registration area) about 57; the average age at death from cancer is about 59. If registrars of vital statistics in our large cities could be induced to reject all death certificates having written upon them as primary causes of death such indefinite terms as "uremia" and "rheumatism," the increase in the mortality from chronic nephritis would probably appear greater than it now does. Upon the other hand, chronic nephritis is so very often complicated with diseases of the heart and arteries that too much weight should not be attached to figures which appear to show an astonishing increase of deaths from the former disease. Chronic nephritis is more prevalent in cities than in rural districts. For this reason great caution should be used in comparing deaths from it and from cancer in years later than 1907 with years earlier than that year as the United States registration area in 1908 for the first time included Washington and Wisconsin, states which have a large rural population.

	1900.	1904.	1905.	1906.	1907.
Per cent. of population in U. S. registration area	40.5	40.4	40.4	48.9	49.2
Crude death-rates per 100,000 of population for diseases named:					
Chronic nephritis	81.5	93.3	93.7	87.9	91.9
Cancer	63.0	70.6	72.1	69.1	70.9

For later years which, as has already been explained, should not be compared with the foregoing, the figures are:

	1908.	1909.	1910.	1911.	1912.
Per cent. of population in U. S. registration area	52.5	56.1	58.3	63.1	63.2
Crude death-rates per 100,000 of population for diseases named::					
Chronic nephritis	83.8	85.3	88.5	87.5	92.5
Cancer	71.5	73.8	76.2	74.3	77.0

Although I am not a physician, and although I know nothing of diseases outside their statistical aspect, I venture to assert that in dealing with increased death-rates for malignant tumors and for chronic Bright's disease, the part played by greater care in making diagnoses and in certifying causes of death should always be kept in mind.

When compared with the cancer death-rate of some European countries, and with the Australian continent and New Zealand, our corrected cancer death-rate at all ages for 1911—78 per 100,000 of population when taken to the nearest intiger—ceases to be remarkable. The corrected rate for 1910 for New Zealand was 84, Australia 87, Prussia 77, Austria 73, England and Wales 97, Netherlands 93. Sooner or later death comes to everybody. If death from old age occurs, it is very uncommon. Cancer and chronic nephritis appear to be two diseases from which comparatively elderly people are now dying in considerable numbers. The former is being investigated in several places as a result of the agitation which has made the public believe that liability to cancer is rapidly on the increase, but very little is being done to ascertain why the chronic nephritis death-rate appears to show decided gains. Excessive consumption of flesh food may be a partial explanation, although conclusive evidence on that point is unobtainable. So far as I can ascertain, alcohol is not producing more deaths from chronic nephritis in large cities than it did a dozen years ago.

The reliability of so-called estimates of the probable increase of deaths due to cancer can be fairly gauged from what has already been written, but additional evidence is always at hand. As long ago as 1899 a prominent surgeon of New York State succeeded in creating

what can only be correctly described as a cancer scare by making an extraordinary prediction as to the probable increase of deaths from cancer in his state in ten years. In the light of what has actually occurred, the period named having now elapsed, the prophecy seems so ludicrous that I omit the name of its author. Stripped of verbiage, this curious prognostication, published in *Medical News* of April 1, 1899, p. 385, was that if during the ten years following 1899 the relative death-rates were maintained there would be more deaths from cancer in New York State in 1909 than from consumption, smallpox and typhoid fever combined. What method of calculation was responsible for this prediction is not known, but a number of newspapers copied it and belief in its accuracy seemed, for a time, to be almost universal. Was not its originator a well-known and popular surgeon? What right had any mere statistician to criticize so "big" a man? In addition, the *Lancet*, of London, was so thoroughly convinced of the verity of this prophecy that it refused to publish a mathematical demonstration of the extreme improbability of it being anywhere near the mark. The ten years in question having more than elapsed, the figures given below are of interest.

Number of deaths in New York State in 1909 from diseases named:

	Deaths.
Cancer	7,034
Smallpox	4
"Consumption" (pulmonary tuberculosis)	13,948
Typhoid fever	1,309

Statistics of total deaths from the same diseases in New York State are for the year 1912:

	Deaths.
Cancer	8,235
Smallpox	4
"Consumption" (pulmonary tuberculosis)	13,702
Typhoid fever	1,128

These figures may perhaps serve to warn some surgeons and some sensational writers of the unwisdom of attempting to estimate the number of deaths which a given disease will be likely to cause at some future time. The more one studies vital statistics the more convinced does one become that such estimates are almost certain to prove incorrect.

In examining the number of deaths attributed to chronic nephritis in the table which follows, the reader is again asked to remember that "uremia" on a death certificate as a primary cause of death often means "chronic nephritis" and that "rheumatism" has sometimes the same meaning, although, so far as I am competent to judge, the latter word more frequently indicates that death resulted from gonococcic infection. Both terms are, of course, out of place on a death certificate, because they do not indicate a definite cause of death. The column headed chronic nephritis includes only deaths recorded under this heading and deaths recorded as chronic Bright's disease.

Number of deaths from causes named in the State of New York in years given:

	Cancer.	*Chronic Nephritis.
1900	4,871	.....
1902	4,989	.....
1906	6,169	8,984
1907	6,420	9,244
1908	6,554	8,468
1909	7,034	9,393
1910	7,522	9,711
1911	7,970	9,644
1912	8,235	10,603
1913	8,536	10,452

The increase in number of deaths registered as caused by both cancer and chronic nephritis in the State of New York between 1906 and 1913 has been considerable, but nothing more than this is proved by the above figures, which have a limited value. By using the estimated population of the state in non-census years they can readily be put in the form of death-rate per 1,000 of population, but the estimated population is, as a rule, more of a conjecture than a scientific calculation.

About 1898 an announcement was made in this city that Buffalo was the tropic of cancer. As I do not know positively who made the original announcement, I refrain from mentioning any names in connection with this unwarranted assertion. That the idea still survives is demonstrated by the following excerpt from an article by Dr. John Egerton Cannaday of Charleston, W. Va., in *Dietetic and Hygienic Gazette* for December, 1912: "It (cancer) is more prevalent in some sections of the country than in others, the country around Buffalo, N. Y., being called for that reason the Tropic of Cancer."

The country around Buffalo is never called the tropic of cancer by intelligent people, because such evidence as is obtainable fails to justify the appellation. First, as to cancer morbidity in the district named, little can be said. Cancer is not a "reportable" disease in Buffalo, or anywhere else, so far as I know, and I have little confidence in the system of "reporting" diseases. Even under the existing law of the State of New York, which requires *any person* knowing of a case of tuberculosis pulmonalis to "report" it, instances occur not infrequently in which the "report" reaches the Health Department on a certain morning and the death certificate is brought by the undertaker during the afternoon of the following day. In plain English, neither the attending physician nor anybody else "reports" some cases of tuberculosis of the lungs till death is imminent. I am informed that epitheliomata, which are, of course, often cured by operation in the early stages, are not more common in Buffalo than in other cities of the same size. I cannot, however, furnish evidence upon this point as my medical friends are not willing to allow me to publish such information as they have. Secondly, as to cancer mortality.

Year 1910.

Per cent. of population of continental U. S. in registration area	58.3
Crude death-rate for cancer in registration cities	80.6
Crude death-rate for cancer in rural districts	70.1
Crude cancer death-rate for Buffalo, N. Y. (population 425,000)	91.6
Crude cancer death-rate for Niagara Falls, N. Y. (population 31,000)	42.5
Crude cancer death-rate for North Tonawanda (population 12,000)	49.9

Both Niagara Falls and North Tonawanda are within twenty-five miles of Buffalo.

The figures already quoted, as well as those given below, are merely crude death-rates and are not even corrected as to non-residents. Corrected cancer death-rates for the cities named are not obtainable. The high cancer death-rate of some cities, especially Albany and San Francisco, may be due to deaths of non-residents at hospitals in those cities, or it may be partially due to the age-constitution of the resident population being considerably above the average of large cities.

Cities with more than 400,000 inhabitants—

	Buffalo.	Boston.	Baltimore.	San Francisco.
Population 1910	425,000	671,000	559,000	417,000
Crude death-rate (1910) for cancer per 100,000 population	91.6	104.5	96.2	113.5

*Not separated from urinary diseases until 1906.

Cities having over 200,000 inhabitants—	Rochester (N. Y.)	Denver.
Population 1910	220,000	213,000
Crude cancer death-rate in 1910 per 100,000 population	99.2	93.5
Cities with a population approximating 100,000—	Albany.	Lowell.	Hartford.
Population 1910	101,000	106,300	99,000
Crude cancer death-rate per 100,000 population in 1910	138.5	84.3	94.6

In all cases the above figures include both white and colored inhabitants, Baltimore and Boston have many colored people. The other cities have comparatively few. The figures giving population are those of 1910 census in round numbers.

Buffalo is evidently *not* the tropic of cancer if crude death-rates for a single year are any guide whatever to finding the "tropic." To quote crude cancer death-rates for a number of years would add little information to that already given as age and sex constitution of any city may vary from year to year. If the tropic of cancer in the United States could be found, some facts might be learned which might aid in discovering the cause of the disease, but with our defective vital statistics the work of finding the so-called tropic would involve extraordinary difficulties. I am compelled to leave investigations of such an arduous character as this one would be to younger men.

Great variation exists in the number of deaths from both cancer and chronic nephritis in some cities of about the same population, even when non-residents are excluded. An example of the truth of this assertion is furnished by a comparison of deaths and death-rates in Saratoga, N. Y. and Ann Arbor, Mich.

Year 1910.
(Decimals omitted.)

	Saratoga Springs.	Ann Arbor.
Population according to U. S. Census	12,693	14,817
Crude death-rate per 100,000 of population	2,042	2,327
Total deaths from cancer	22	49
Crude death-rate for cancer per 100,000 of population	173	330
Total deaths from both forms of nephritis	34	17
Crude death-rate for both forms of nephritis (per 100,000 population)	268	114
Number of deaths from cancer when deaths of non-residents are excluded	17	37
Number of deaths from chronic nephritis (acute omitted) when deaths of non-residents are excluded	19	8
Crude death-rate for organic diseases of the heart per 100,000 of population	142	155
Crude death-rate for all forms of tuberculosis per 100,000 of population	189	182

My friend Dr. Carroll J. Roberts of Buffalo has offered an explanation of the above figures which had not previously occurred to me. He suggests that some sufferers from cancer may have moved their permanent residence from country places to Ann Arbor in order to obtain treatment at one of the hospitals there. Ann Arbor has five hospitals—total beds 414. Dr. Roberts also suggests that some nephritic patients may have made Saratoga their home to enable them to get the benefit of the waters of that place. Saratoga has four hospitals, 341 beds.

As English corrected cancer death-rates are much more complete than our own, and as some alarmists in the United States wish to give the impression that the the death-rate for cancer is increasing in England by leaps and bounds, I append an excerpt from an article by Dr. E. F. Bashford, director of the English Cancer Research Laboratory (*Medical Record*, Sept. 4, 1909). About two years later, in his annual report dated July, 1911, Dr. Bashford once more expressed his opinion that cancer was not increasing in his country.

"When due regard is paid to the universality of cancer in men and in animals, to the varying value of the data used for statistical purposes in different countries, and in the same country at different times, as well as to the varying accuracy of the statistical methods employed, I very much question if those persons who have made exaggerated statements to the effect that the recorded increase represents a true and increased liability to cancer have any excuse whatever for enhancing the reasonable anxiety of the lay public."

I ask that these cautious words written by a scientific investigator of high rank be contrasted with the alarming utterances of a few sensationalists, most of whom are ignorant of the elements of vital statistics, and who, as a result of the unwillingness or inability of the public to search below the surface for facts, have succeeded in producing great anxiety in the minds of some men and of very many women.

PRACTICAL VENTILATION.

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This article is prompted by one in the Medical Times for August, 1914, by Dr. J. F. Rogers of New Haven, which has received considerable notice, especially from technical and popular periodicals. The writer has for years in the building of houses and apartments, recommended a method which, while not wholly unlike that in use by other sanitarians, is in its fuller use quite revolutionary, apparently, when compared with ordinary scientific ideas of pure air within the occupied room. This method of ventilation consists, broadly speaking, of using outlet flues so carefully placed as to remove the exhalations or other contaminations without the necessity of the wholesale changing of the atmosphere by the unreliable open window and door method of our common house construction.

We will at first note the agreement among technicians that an apartment or room should receive for each occupant 3,000 cubic feet of outside air per hour, in order to maintain the inside air at a standard of purity, in which the expired carbonic acid gas, CO_2, shall not exceed 50 per cent. of the normal in outside air, which normal is four parts in 10,000, the limit being six parts in 10,000. The conclusion is that at this stage the air becomes unfit for use, not on account of the excess of CO_2 "but because other impurities have increased and oxygen has diminished." The "other impurities" are organic matter and vapor containing, besides the products of tissue metabolism, infectious organisms if perchance such may exist and be thrown off with the expired air.

It is true the 20 per cent. of oxygen in normal air is reduced to 16 per cent. in expired air but this is not too low to support life, or to do so sufficiently. But the actual amount of oxygen consumed in eight hours by the average person is only 6.4 cubic feet, and in a room of 1,200 cubic feet capacity the oxygen has been reduced from 240 cubic feet to 233.6 cubic feet, only a loss of only 2 2-3 per cent.

Of CO_2 there has been produced in the same time six and four-tenths cubic feet, or only two-thirds of 1 per cent. of the air in the said apartment of 1,200 cubic feet capacity.

This gives us food for thought and opens up the question of Practical Ventilation, viz.:—Is it necessary to bring into a living room 3,000 cubic feet of outside air with its dusts and infections, in order to dispose of the 20 cubic feet of expired air the amount of air breathed by the average individual each hour?

We need not dwell upon the folly of ancient theorists who contended that motion purifies, nor should we be long patient in mentioning the false efficiency of the modern electric fan which cools the brow and serves no other purpose usually. We should better comprehend the methods of these who propagate fishes in which the method of a proper and sufficient intake with a corresponding outlet of fresh water is reduced to almost an exactness.

The House of Commons in London is supplied with fresh air in the quantity of 500,000 cubic feet per hour, enough to supply full needs for at least 35,000 people. It is perfection indeed but its volume and rate of flow and location of entrance throws all the dust and infections which naturally settle to the floor, into the air to be breathed by the occupant. It seems a strange luxury even if pure air is supposed to be free. It has this benefit, however, over the popular method of allowing the wind to blow through the house, in that it is thoroughly cleansed before coming from the street.

There are many intelligent housewives and others of her kind who know the air of the populous city or highway or yard contains quantities of dust and infection; 79,000 microbes per cubic foot of the air of Paris as compared with six only in the air of midocean, is the proportion, and besides this the air of the city contains quantities of noninfectious coal dust, organic matter, excreta of animals and odors. Who of us has not perceived the wholesome results of cleaning the room thoroughly, and then closing it to keep it clean? A clean, air-tight aseptic room is an aseptic package and will remain so indefinitely. And is it not a reflection on our methods of housing, if there is any need of ventilation of unoccupied apartments? Is it possible we need the wind to blow through our rooms to dilute insanitation?

What this age demands is the same accuracy and intelligence in ventilation that is demanded in every progressive method. By intelligent we mean that conception of the subject in harmony with modern sense which says that only 20 cubic feet of air is breathed each hour by the average individual, and if that exact portion were removed and the same amount allowed to creep in through the cracks even, the 3,000 cubic feet of the scientific sanitarian could be reduced by one hundred and forty-nine one hundred and fiftieths and the standard of purity would not be affected. We should comprehend that a room of 1,200 cubic feet capacity contains enough air for the respiration of one person for two and one-half days, if the same could be accurately consumed as food is. Yet present methods for the removal of the consumed air consists in blowing 180,000 cu. ft. of dust-laden air through the room, making it a veritable catch basin for the heavier than air impurities. I must ask if this is modern efficiency or cleanliness?

Manifestly we cannot supply air with the exactness of food and drink, for while the exhaled air must be treated as excreta by the technician, its disposal must of necessity be automatic and self operating or nearly so. To be perfectly automatic would require living in the open, and even then, under normal temperatures and quiet atmospheres, bodily movements, as Dr. Rogers suggests, would have to be added.

This opens up the question, "Is ventilation a process of bringing in fresh air, or is it the process of disposal of impure air?" As sanitary unoccupied houses need no ventilation, a rule may be established that unoccupied houses need ventilation in the inverse ratio to the perfection of the sanitation, and that occupied houses need it only in proportion to the amount of contamination. This gives us the definition that ventilation is the removal of atmospheric impurities from apartments. This makes ventilation and drainage kindred terms, both being processes of removal and not of dilution.

As to method, we agree with Dr. Rogers in his demonstrated conclusions and say that it is unwise to depend on open windows and doors for ventilation on account of inaccuracy and undesirable introduction of external infectious material. First, it would be like turning a stream of water through the stable in order to secure good disposal of its accumulations, and, second, the room acts as a catch basin for dusts.

In order to remove the 20 cu. ft. of expired air which the average person expires each hour, we can say that a flue properly placed and made large enough to embody the full element of safety, depending on the efficiency of the devices, and their proper adjustment, and at the same time made to operate by means of heat from an adjacent chimney, or mechanical drafts maintained by fans, will enable this accomplishment to be simplified. A flue one inch in diameter with a normal air flow of 12 miles an hour or 15 feet per second will displace five cubic feet per minute. In four minutes the hour's expiration will have been equalled. Here is an element of safety of fifteen to one. Reduce the draft rate to five feet per second and we have still a safety element of five to one. Now increase the diameter of the outlet and square the ratio and we have the safety limit of 20, 45, 80 as compared with 2, 3, or 4, inches of diameters in the outlet flue, respectively.

It is evident the method of removing the "used" air, on account of circumstantial contamination, must be supplemented by this element of safety, the ratio depending on the proximity of the outlet aperture to the point of expiration. Accuracy is here necessary, and each sleeping apartment should have its ventilating register at or near the head of the bed. In other rooms the placing should be carefully chosen, usually on a level of the expiration and near its point, as aforesaid. The safety limit may be liberal but it should be very much less than the 150 to one rule which is often forgotten and we often see it reach thousands, with all the attending dusts.

Popular ideas of wholesomeness in drinking waters, dairy products and pure air shall doubtless progress far beyond present conceptions, and it is not too much to expect that a pure air supply shall some day become a part of our commercial household necessities, even as is ice and drinking water.

The freedom of the members of certain families from adenoids is worthy of comment, And who is able to say that dust may not be its cause. The writer asserts that he has seen many cures result from frequent ablution of the nasal passages in cases of hay asthma.

The article by Dr. Rogers doubtless solves the cause of certain unlucky corners of hospital wards, as well as the restlessness of children in certain corners of bedrooms. In his findings we may be able to see why we now and again cannot sleep when all things are otherwise favorable. It causes us to remember how the children renew their peaceful sleep after flushing their room at midnight with fresh air. It is our wish that we shall soon see the time when each public apartment shall be equipped with a method of accurate air supply supplemented by a system of positive removal of contaminations equalled up to the safety limit of the source of contamination.

HOW TO KEEP YOUNG.*

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How to keep young is a subject of universal interest. Extraordinary attempts to keep young have been made in times past, even to the extent of perilous adventures in search of the Fountain of Youth and the wasting of lives and fortunes in trying to discover the Elixir of Youth. At the present time a considerable portion of the population of civilized countries, at least of the female part of it, undergo regularly or frequently, tedious, troublesome, and even painful and dangerous procedures for the purpose of securing only the appearance of youth.

What does it mean to keep young? It means, essentially, to keep healthy. It means to postpone as long as possible the changes due to old age. Old age must come eventually to all, but if the changes belonging to it come before their time, they mean unhealth.

In the brief and informal discussion of this great subject which is presented here, I shall confine my remarks to a few practical and familiar topics.

The first topic in connection with keeping young to which I ask attention, is the care of the skin, and to make the discussion more acute, to bring it, perhaps, to a more familiar focus, I shall treat this topic from the point of view of the complexion. Most people, particularly women, consider a good complexion a sign or signal of youth, and many people, mostly women, devote much time and trouble to maintaining a good complexion, or the appearance of one. Too often they are satisfied with the appearance without the reality. In order to have a complexion which truly means that you are keeping young, you must treat your skin from within instead of from without. But the custom of treating the skin from without for the purpose of giving it a youthful appearance, seems to be more extensively prevalent now than at any time in the world's history. This popular external treatment varies all the way from the use of comparatively harmless soapstone powders to the local application of metallic poisons and employment of the beauty doctor. Anent the last I will tell you a short story. A woman came under my observation some time ago who was dissatisfied with her complexion. She went to a beauty doctor. He applied to her face a paste which I guess contained a large percentage of corrosive sublimate. This paste produced an intense and painful inflammation of the skin. After the inflammation subsided, the superficial layers of the skin peeled off, leaving it soft, tender and pink. The woman was delighted with her new complexion, and cheerfully paid the large fee of the beauty doctor, who wanted his money immediately. But her joy was short lived. Soon the new skin began to show fine wrinkles, and to become harsh and thick, and the last state of that woman's complexion was worse than the first. This, of course, was an extreme case, but all external applications, even if they do not do positive harm, can give only the semblance and not the reality of a healthy and youthful complexion; only treatment from within can give the reality. In this connection I am tempted to quote Robert Browning's description of a lady's make-up:

"And were I not, as a man may say, cautious
How I trench too much on the nauseous,
I could favor you with sundry touches
Of the paint smutches with which the dutchess
Heightened the mellowness of her cheek's yellowness,
(To get on faster), until at last her
Cheek grew to be one master plaster
Of mucus and fucus, from mere use of ceruse.
In short, she grew from scalp to udder
Just the object to make you shudder."

To understand the rationale of keeping a good complexion, it is necessary to know something of the physiology of the skin. The skin is not only a protection to the flesh underneath, but it is also one of the organs for the elimination of waste products from the body; it is one of the sewers of the body, in fact, and a sewer with multitudinous outlets. These outlets are the pores. The pores must be kept open, or waste products accumulate in the skin and poison it, and cause it to become unhealthy and to have a bad appearance.

In order to keep the pores well open the skin should be kept clean and properly ventilated. This is effected by washing. Here I desire to say a word on a subject which has been much discussed, viz.: the use of soap. To what extent should soap be used on the skin?

An English physician not long ago achieved some newspaper notoriety by asserting that people generally washed themselves too much, and by condemning absolutely the use of soap in washing the skin. He claimed that soap removed from the skin the natural oily secretion which nature provides for its protection against irritating substances. This claim is plausible, but it is not the whole truth. The whole truth is more like this. Removal of the waste products on the skin by soap and water is good for the skin, but removal of too much of the oily protective substance is bad for it; and soap should be used in moderation, so as to remove the waste substances without taking away too much of the oily substance. A certain amount of this oily substance is necessary to the health of the skin, and strong alkaline soaps, like borax soap, which remove it completely, leaving the skin very dry, are particularly injurious, and may even cause serious disease of the skin. This oily substance may be excessive or deficient in quantity, and both of those conditions are manifestations of unhealth. They should be treated by correction of the underlying conditions to which they are due. In general, I think we may say that there is probably less harm done by using soap on the skin too much than there is benefit lost by failure to use it enough.

Of the general causes of unhealth of the skin, the most important are the following: External irritants, infection by microbes and consequent inflammation, disturbances of the circulation, and the presence in the blood of excessive amounts of poisons.

External irritants are among the least important of the causes of a poor complexion; that is, the irritants which occur in the ordinary course of life—cold, heat, dust—seldom do much harm. If you get tanned or sunburned, it is apt to do you more good than otherwise. Freckles can hardly be considered a serious blemish if the skin is otherwise healthy. The external irritants which do the most harm are probably those which are found in cosmetics. While some of the face paints, powders, lotions and salves may be comparatively harmless, and while some, like cold cream, may be even beneficial in some conditions, many of them are not harmless, but the contrary; and there can be no doubt that naturally good complexions are often spoiled by the use of cosmetics.

The subject of infection of the skin by microbes and

*An address to the Rainy Day Club of New York, October 7, 1914.

its consequent inflammation, I shall pass over with the statement, that such infection and inflammation usually occur only when there is a predisposition brought about by other causes of unhealth of the skin. Pimples and furuncles are infections that come when the power of the skin to resist microbic invasion has been lessened by its unhealthy condition.

Disturbances of the circulation are common causes of unhealth of the skin. They come from indigestion, the use of stimulants, especially alcohol and coffee, and from overwork, dissipation, excitement and late hours. There is truth as well as poetry in calling a little extra sleep a beauty sleep. It is such disturbances of the circulation that give you the "morning after" complexion, which makes you look as if you had been "drawn through a knot hole," etc.; they produce an unnatural pallor, or ruddiness, or muddiness of the complexion, besides predisposing to other skin troubles.

Of all the causes of unhealth of the skin, probably the most extensively active is the presence in the blood of excessive amounts of poisons; and of those poisons, by far the most important seem to be the food poisons which are manufactured in the alimentary tract, chief of which are the poisons which result from decomposition or putrefaction of animal food. I will not dwell here on this extremely important and far reaching subject, more than to say, that if you are dissatisfied with your complexion, there is nothing which you can do that will be more likely to improve it, than to make such a correction of your diet as will greatly reduce the amount of putrefaction products manufactured in your alimentary canal. This means cutting out of your diet a large portion of the articles of food which putrefy readily; also those articles which favor intestinal putrefaction by delaying digestion, and also those which directly disturb the liver and other protective organs and thereby impair the power of those organs to destroy putrefaction poisons.

So much for the complexion. Now, I ask your attention to a few words on another point which has a very important bearing on the subject of keeping young, viz.: the prevention of obesity.

Youth is naturally associated with slimness, and perfect health at any age is incompatible with obesity. Obesity is a disease, a disease in which the combustion in the body is not complete. Life is combustion, and if this combustion is incomplete or is imperfectly regulated in any particular phase, a morbid condition results. There is, then, something the matter with the stove, or the draft, or the fuel, or all three. Imperfectly burned up tissues are left in the body in the stage of fat. A certain amount of fat is properly stored up in the body for a reserve supply of fuel in emergencies and for padding, but more than that amount is unhealthy. It is a sign of premature old age for a person to accumulate fat unduly.

It is interesting to note that obesity is a disease of civilization. Man in the wild state is regularly thin, as are the wild animals. The reason is that in the state of civilization opportunities and inducements to live unhygienically abound more than in the wild state. Yet it is not necessary for civilized man to live unhygienically, for with his superior knowledge and intelligence he can, if he wishes to do so, live more hygienically than the savages or the wild animals.

To avoid becoming fat it is necessary to bear in mind the causes of obesity, among the more important of which are these: Eating too much, eating the wrong things, functional weakness or disease of the liver, disorder of the organs in the body which regulate combustion, poor circulation, poor ventilation, insufficient exercise, and constitutional predisposition.

Eating too much is not, by itself, so frequent a cause of obesity as might be supposed. We have all seen people who were enormous eaters who were thin; and it is a matter of common observation that fat people are often small eaters. But eating too much is a very common and effective cause of obesity when taken in connection with other causes.

Eating the wrong things seems to be a more important cause of obesity than eating too much. What are the wrong things? They differ for different people, but, in general, they are articles which disturb the physiology in some way or other, particularly the digestion or the liver. Sugar is often a wrong thing; so also is meat. Many people have the idea that starchy foods are especially conducive to obesity, and so they are if eaten to excess, but not otherwise.

The relation of the liver to obesity is a very real though complicated relation. The liver is the storehouse and distributor of most of the fuel which is directly burned up in the body as such, but it is not in that connection that its relation to obesity appears most distinctly. It is, probably, in its function of destroying poisons in the body, which depress the activity of all the organs and tissues of the body, that we find its most important relation to obesity. Certain it is, that people with sluggish or overworked livers show a tendency to become fat.

How the organs in the body which directly regulate combustion get out of order is a particularly complicated and difficult subject, and one about which even the most advanced investigators in physiology know very little. It is sufficient here to mention the fact that there are such organs, and that to keep them in good health so that they will do their work properly is of the first importance in preventing obesity.

The relation of the circulation of the blood to obesity is easily perceived. The blood carries the oxygen, which is used to burn up the fat, to all parts of the body, and it also carries away from the tissues the waste products, which, if left in them, would clog them so that they would not burn freely.

Poor ventilation, that is, an insufficient supply of air to the lungs, makes it difficult for the blood to get oxygen enough for the necessary purposes of combustion. This explains why plenty of fresh air and exercises which compel deep breathing, help in keeping down obesity.

A sedentary life or one with little exercise, results in a complicated disturbance of the physiology, including depression of the activity of the liver and of the organs mentioned as having a regulating power over the processes of oxidation in the body. Insufficient exercise of the muscles brings about also an abnormally low demand for oxidation, as well as a sluggish circulation and an imperfect elimination of waste products, all of which are sufficient causes of obesity, especially if taken in connection with too much eating or eating of the wrong things. To be lazy and fat is a common saying. But this association is not universally found, however, and we often see very active people who are fat, but for other reasons.

Probably the most important cause of obesity is a constitutional predisposition. This is also the most difficult one to overcome. How often do we see people who are slim enough in their twenties, develop obesity in their thirties, or at most forties, and do this while living in the same way as many others who fail to become stout? These people possess a constitution which

becomes prematurely old as regards the ability to burn up their fat, and probably also in other respects. Such persons must do more than is required of the average person if they would preserve their youthful slimness. By looking into their family history, as regards obesity and allied conditions, they can usually get a line on their own prospects; and they should not wait before doing this until particular organs and tissues or the whole bodily machinery involved in keeping down their fat has become deranged. They should begin to fight obesity before they become fat. Incidentally, if those people who are apparently destined to become obese early, are beforehanded in taking these precautions, they may also save themselves from other evils to which they are presumptive heirs.

In speaking of the care of the complexion and the prevention of obesity in connection with keeping young, I several times mentioned the liver. The functions of the liver occupy so large a place in human physiology, the liver is so prominent a member of the human corporation, one of the directors, so to speak, that it deserves special mention by itself. To keep young is the same thing as to keep healthy, and to keep healthy, from one point of view, and a very important one, is to keep from being poisoned. We are constantly being threatened with being poisoned. Microbes would poison us. Our own waste products would poison us. We would poison ourselves with whiskey, coffee and other drugs. From the fermenting and putrefying masses in our alimentary canal we are constantly absorbing poisons, and virulent ones. Against all these poisons our most important means of defense, our most strenuous and successful defender, is the liver. From this fact alone, to say nothing of others, for the liver's activity is not limited to the destruction of poison, it is plain that in order to keep healthy, and therefore young, we must see to it that the liver is kept in good condition. In an address which I made to this club nearly two years ago I spoke of the liver and its hygiene.

Another matter of prime importance in connection with keeping young is the care of the circulatory apparatus. You have doubtless all heard the saying, that a man is as old as his arteries. There is much truth in that saying. Consider what it means to us to have our circulatory apparatus in good order? Our bodies are enormous collections of living cells which are stationary as regards each other. These cells must be fed, get oxygen, and be relieved of their waste products. For all those essential things they depend absolutely on the circulation of the blood. The blood is the constant and regular carrier to all the body cells, of food with which to replenish their substance, of fuel with which to warm and energize them, of oxygen with which to effect the chemical changes that constitute their life; and into the swiftly flowing blood stream the cells cast out their refuse. The circulation of the blood is carried on by a central pump and a system of closed tubes. Its efficiency depends on the condition of the pump and tubes. If the pump is weak, if the muscle of the heart is strained from overuse, or poisoned from long continued drinking of alcohol or long continued absorption of putrefaction poisons from the intestines; or if the tubes are stiff, if the arteries have become thickened and rigid from long continued overstrain or chronic poisoning, then the circulation is liable to fail in efficiency and the cells of the body to suffer from starvation or retention of their waste products, or invasion by other poisons which might have been eliminated with a better circulation.

Particularly important in connection with keeping young is the maintenance of a good condition of the muscles. If you would keep young, you must keep spry. Many people, especially in the cities, unless they belong to certain of the laboring classes, fail to give their muscles a sufficient amount of work to keep them in good order. Muscles are made to be used, and unless used sufficiently will degenerate and become old. Wise are those men who compensate for a sedentary occupation by walking to business, by golf and by out-of-door sports, or even by billiards or home gymnastics. Wise are those women who walk to market, and who do much of their housework themselves, even though they can well afford to employ servants to do it for them. The craze for dancing which has recently swept over the country, has something to be said in its favor in this connection.

And the mind must be kept active as well as the body. The mind can grow prematurely old as well as the muscles, or the liver, or the arteries, or the skin, and from much the same causes. The condition of the mind depends on how the brain is used as well as on how it is fed and how it is poisoned. Mental sloth invites mental decay.

The last point to which I ask your attention in connection with the subject of how to keep young, is the very important one of keeping cheerful. Youth in general is inclined to be cheerful and old age to be sad. Youth is naturally buoyant, while age is easily depressed and is roused from depression with greater difficulty than youth. And the older we get the more inclined we are to worry. Now worry is particularly baneful in its effect on the body as well as on the mind and disposition. It is a potent factor in producing disturbances of the circulation, even causing hardening of the arteries and degeneration of the heart muscle. It often produces disturbances of the digestion with all that such disturbances mean. It interferes with sleep, which is most essential to keeping healthy. And it changes the expression of the face, making it look older.

In concluding these desultory remarks on the great and complicated subject of how to keep young, I will offer a few practical recommendations, which are suggested by what has been said.

Find out early where you stand relative to the average constitution, so that you can allow for any constitutional weakness with which you may have been born or which you may have acquired. That is, if you have reason to suspect that your bodily machine is not one of the best or most durable makes, do not try to run it as if it were, but run it more easily so that it will not wear out before its time. And if you find that your bodily machine has already been strained so that it shows definite signs of weakness, run it so as to favor its weakness and to postpone as long as possible its eventual breakdown. It is much easier to keep young before the infirmities of age have fastened upon you than it is to throw off these infirmities.

Remember that a good complexion depends chiefly upon your food, your digestion, your liver, your work, your play, and your sleep; and that you can best improve it, if it needs improvement, by changing your food and your conduct.

Do not strain and weaken your liver by dietetic excesses and other unhygienic procedures in your youth, but carefully cherish and conserve it, so that it can protect you from things that would make you old before your time.

Work your muscles enough to keep them in good condition. If you are so unfortunate as to have no incentive to work them, find one.

Likewise keep your mind from rusting. If you do not have to work your mind for a living, work it for play or for exercise. At the worst, get a fad or a hobby.

And always be cheerful; keep pleasantly occupied in your leisure moments, and especially don't worry. The best antidote for worry, next to pure happiness, is to have the mind well occupied with other things.

But while at work or play, be careful not to overdo things. Neither let yourself rust out from inactivity nor wear yourself out by overwork. Remember what Balzac says: "By two instinctive processes man exhausts the springs of life within him. Two verbs cover all the forms which these two causes may take—to will, and to have your will." This is a profound remark. If you will to conquer the world, to make a distinguished name in literature, science, art, politics, sports; or to amass a great fortune; or to be a great social leader, or to enjoy to the fullest the pleasures of life, you can thereby exhaust the springs of life. Willing to do a thing means striving to do it, and if the thing is beyond the ordinary, the effort is exhausting; and if you succeed in the endeavor it is even more exhausting. All this means, that if you would keep your health, if you would keep young as long as possible, you will, in your working and in your playing, in your eating and in your thinking, always strive to preserve the golden mean.

1218 Pacific Street.

SOCIETIES OF MEDICAL JURISPRUDENCE.*

Their Defects—The Remedy.

OSCAR W. EHRHORN, A. B., LL. B.
New York.

This convention of the American Association of Medical Jurisprudence, appropriately holds its first public meeting on the second day of May, for the reason that on this date in the year 1787 the Federal Convention assembled in Philadelphia to adopt a Federal Constitution and from that comparatively small gathering came forth action which has resulted in most important action. That convention at that time adopted a Constitution which contained provisions and provided for carrying into execution suggestions and methods which at that time had not been attempted or suggested in similar form anywhere else. So this central society of intended national scope, a clearing house for subjects of national import, covering a field not essayed by local societies and associations may we hope develop a strength and usefulness no more dreamed of now than did the Fathers of the Country at that time of their association. It is also for that reason I shall make bold at this convention to sumbit certain thoughts and suggestions which may be considered here, although many will think them abortive, still they are submitted to form a basis of discussion that I trust may be profitable to all.

Before entering upon the discussion of my topic it will be well for us to reassert just what is meant by the term "Medical Jurisprudence" or "Forensic Medicine," which I shall consider as a syonymous term in this treatment. It may be said to embrace all those questions which bring medical science to bear on legal questions in determining criminal and civil responsibility. It therefore embraces questions affecting civil and social rights of individuals and injuries to the person and practically treats of the relations of the individuals from even before his birth to after his death. This is seen at once when we consider that within its province are the subjects of pregnancy, birth, monstrosity, rape, accidental or intentional injuries, the action of drugs, insanity, natural death and murder, etc. We therefore note that while the subject has to deal with the medical profession and the legal profession on the one side, yet on the other it has to deal with all the various individual and group relationships of our complex civilization.

The question as to whether or not an organization is successfully carrying out its mission depends of course upon a consideration as to what is its proper purpose. At the present time there is great discussion everywhere as to whether or not the Church is living up to its obligations and is really grappling successfully with modern problems; whether or not it deserves support from the laboring and other classes. People differ as to the answer according to whether or not they believe that its proper sphere is to accomplish results directly or merely whether its proper sphere is to discuss principles and plant in the hearts of men the proper spirit to themselves effect results and reforms.

Therefore with respect to societies by whatever name they may be called organized to deal with the subject of medical jurisprudence, the answer as to whether or not they are successful and justify their existence depends upon the view point we take as to whether or not their proper function is merely to discuss questions affecting the underlying principles or whether their purpose is to effect legislation and administrative rules which will result in the betterment of society.

In the preface to the First Edition of the Encyclopedia Brittanica published in Edinboro in 1768, Colin MacFarquhar, its originator says:

"Utility ought to be the principal intention of every publication. Wherever this intention does not plainly appear, neither the books nor the authors have the smallest claim to the approbation of mankind."

There are those who take the position that associations which deal with such subjects as those under consideration should have the same watchword and that unless they accomplish real reforms or tend to some practical betterment as seen in actual practice they are of no utility; and yet there are others who held that most societies and professional bodies to-day are too much imbued with the idea of making their societies little legislatures and forget that there is a real need for places where there may be a consideration of broader and more fundamental topics examined in a scientific, historical and comparative manner.

If we assume that such societies are accomplishing a desirable end merely by the discussion of questions, it may be said that in their present organization they are comparatively ineffective by reason of their want of reaching a sufficient audience. These societies are usually branches of bar associations or medical associations, or if they are independent societies, are composed merely of representatives of these two professions and sometimes of representatives of the chemical profession.

The topics with which they deal however affect all classes of society and if they are to accomplish a desirable result by discussion it may be said they should reach larger audiences than most of them indeed do.

If we adopt the view that the organizations can only justify their existence by showing real reforms accomplished by way of legislative enactments or administrative orders, we may have to confess that little progress has been made. Taking for instance the New York Society of Medical Jurisprudence, it was established in 1883 and has had a financially and socially successful life during which most eminent members of the medical and legal professions have read and discussed papers

* Read at the 1914 meeting of the American Association of Medical Jurisprudence.

before the society. Yet we note that notwithstanding the lapse of years and numerous papers and discussions it has been unable to effect a desirable change in the law with respect to medical experts and their testimony or with respect to the laws appertaining to the treatment of the criminal insane. It may be true that this is somewhat due to the lack of interest shown by members of the society generally, for its roster contains the names of the most influential lawyers and doctors in the city and state of New York and vicinity. It may also be due to the fact that programs adopted by this society were in conflict with those of other professional bodies dealing with the same subjects. Yet the fact remains that little or nothing has been accomplished in the way of remedying conditions and curing the evils.

The ineffectiveness of the societies may also be seen with regard to the protest made against enacting a proposed burdensome Federal Law dealing with narcotics and interfering with intrastate handling and prescribing of same by reputable physicians. Numerous other instances might be cited which the shortness of time allowed to this paper will not permit referring to. The speaker, however, offers for consideration the suggestion that important results might be obtained if the basis upon which the societies are formed were changed. They are now organized upon the theory that they are purely professional scientific societies and that insomuch as they deal with the relation of medicine to the law and of the law to medicine they therefore interest only members of those professions, but when we consider the fact heretofore shown that the layman in his various individual and group relationships is also interested, we perceive that he may well ask why he also should not be admitted to membership to the end that questions may be discussed and legislation perhaps obtained which will be viewed not merely from the purely scientific professional standpoint but also from the common every day viewpoint of the individuals most interested.

Edward Lindsey, Esq., a well known member of the Pennsylvania Bar Association in his paper at the last annual meeting of that association under the title "The Need for a Science of Law," said

"We must restore proper recognition of the functions of the Courts in the development of law, a function now too much over-shadowed by that of legislation . . . this can come only through the study, the building up and the utilization of a broader, deeper and more accurate knowledge of individual and group relationships."

Judge Orrin N. Carter at the annual meeting of the Criminal Law and Criminalogy at Montreal in September, 1913, said:

"The Legislatures more frequently perhaps than the Courts ignore social development and human nature itself. Laws are enacted without study or investigation, simply to satisfy the whim or caprice of some individual or class."

With the membership of these societies restricted as they are both as to character of membership and therefore as to the members whom they reach, are not those persons largely right who say that comparatively little may be expected in the way of effective results? It is undoubtedly true that for the purpose of discussion a small body such as this association, composed of men vitally interested and generally informed on the subject, meeting once annually, is accomplishing a great deal by the exchange of views of its members. But unless these exchanges of views are followed up in the different localities by associations and societies dealing at first hand with the problems and considering them day in and an day out and month in and dmonth out can we expect much in concrete results for betterment of society. The power of public opinion is great when it is sufficiently educated and aroused. But comparatively small bodies of interested professional men cannot hope to accomplish as much as they could if their influence was made to reach the other groups by direct discussion and co-operation with them. It must also be remembered that very often the professional man's view is diametrically opposed to that of the layman and the true solution of the problem may be in between the two.

I would therefore suggest these questions for your consideration:

First—Has your own local society, or section, or association, made satisfactory progress and accomplished satisfactory concrete results for its time and labor expended?

Second—Is its method of organization such as to most effectively attain such results?

Third—Does it appeal to those who should be interested and of aid to it and society in the most effective manner?

Fourth—Does it succeed in its efforts to reach desirable members?

Fifth—Is your locality adequately represented and is social and professional improvement hindered by lack of co-operation elsewhere?

Sixth—What are the reasons for comparative failure or success in each case?

Seventh—How may conditions be remedied and improved and how may this association assist in the good work?

15 William Street.

THE RESULTS OF THE OPERATIVE AND NON-OPERATIVE TREATMENT OF IRREDUCIBLE FRACTURE OF THE NECK OF THE HUMERUS.

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Brooklyn, N. Y.

The line of this fracture is usually oblique and runs from within upward and outward. The lower fragment is displaced upward. The violence is sometimes sufficient to separate some of the muscular attachments which resist the upward displacement of this fragment. The head is frequently dislocated in this injury, in which event the fracture may be treated first and the dislocated head replaced when union is complete or the head reduced through the wound of operation when the fracture is treated by the open method. There is no hope of obtaining a good result without cutting down on the injured bone and securing the fragments by some mechanical means. Any other method of treatment would give more or less over-riding with limitation of motion especially toward the horizontal plane away from the body. This is shown in the result obtained in Case 1.

Case 1:—M. C., age 40, clerk, fell and broke his left humerus at the surgical neck. He was treated by a physician and obtained the result shown in Plate 1. I saw him two years after the accident and found the shoulder joint limited in motion especially away from the body toward the horizontal plane; an attempt to raise it in this direction brought the proximal end of the distal and fragment against the acromion process; the distal fragment had over-ridden the head and was united to the head with bony union so as to form a short neck between them. The muscles had been partly torn away from the distal fragments and had wasted. The result

PLATE I.

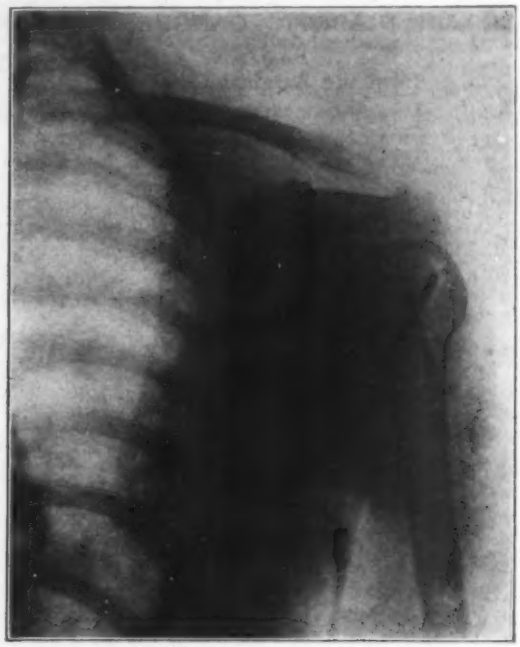

PLATE III.

of this treatment was a failure and left the man with a crippled arm. Compared with this the open method stands out as a brilliant attainment as shown in Case 2.

Case 2:—E. B., age 42, unmarried, family and previous personal history negative, fell and broke her right shoulder. I saw her soon after the accident and took the *x*-ray in Plate 2, which shows an oblique fracture at the upper end of the humerus with the distal fragment displaced upward and over-riding the head. The right humerus measured 2 inches shorter than the left. I sent her to the Long Island College Hospital and made an incision along the outer aspect of the shoulder and exposed the broken ends of the bone; I placed them in correct position and secured them with two metal screws. I closed the wound and put the arm and shoulder in a cast. The cast was removed in five weeks and union was firm, passive motion restored, full excursions of the joint. Three months later she came to me complaining of the screws in the bone and I removed them under infiltration. She had a perfect joint.

The result in this case is shown in Plate 3 before the screws were removed.

A comparison of these two cases leaves no room for doubt as to the value of this method of treating these oblique fractures of the upper end of the humerus.

30 Schermerhorn Street.

PLATE II.

Chronic Cystitis in Women.

G. G. Smith, Boston, holds to the view that persistent cystitis in women is not in itself a disease, but is the result of pathologic conditions outside of the bladder. This, however, is not the view generally held. He does not contend that simple cystitis never occurs, but such cases will generally be cured by a few days in bed, urinary antiseptics and a few irrigations. If it still exists we must look for some other lesion, either in the kidney or ureter, in pelvis or urethra, or in the mechanism by which the bladder is emptied. He has collected the histories of ninety-eight women with cystitis, ward cases or out patients at the Massachusetts General Hospital, and analyzed them according to the pathological conditions existing. In eight cases a simple cystitis was found. In the others renal infections, non-tuberculous, existed in 61 per cent., renal tuberculosis in 19 per cent., and in the others there was difficulty in emptying bladder, systemic and pelvic infections, or other causes. Every case that was really studied showed a certain or presumptive underlying cause and he maintains that simple cystitis is practically non-existent. Synopses of the cases classified as to the infection from renal sources or from ureteral causes or obstruction are given.—(*J. A. M. A.*)

HARE-LIP; DIABETIC GANGRENE; LANE-KINK.

From the Surgical Clinic of
WILLIAM FRANCIS CAMPBELL, A.B., M.D., F.A.C.S.
Brooklyn, N. Y.

Hare-Lip.

History.—Patient, female, two weeks old, enters hospital because of a congenital defect in the upper lip. The child is unable to suckle the breast and must be fed with a spoon. Even then the mother notices that the child does not swallow naturally but often regurgitates a portion of the milk through the nares.

Comment.—Hare-lip is a congenital fissure or cleft of the lip due to arrest of development. This difference is to be noted between the upper and lower lips.

The lower lip develops from two centers which fuse in the median line, and a congenital fissure of the lower lip rarely occurs.

The upper lip develops from three centers: a median, represented by the frontonasal process, and two lateral, corresponding to the superior maxillary processes. When these processes fail to unite on one or both sides of the frontonasal process there results a unilateral or bilateral (single or double) hare-lip (Fig. 1). The failure of these fissures to close may be due to some mechanical or pathological obstruction; they are developmental defects in which rachitis or increased intracranial pressure may play an important role.

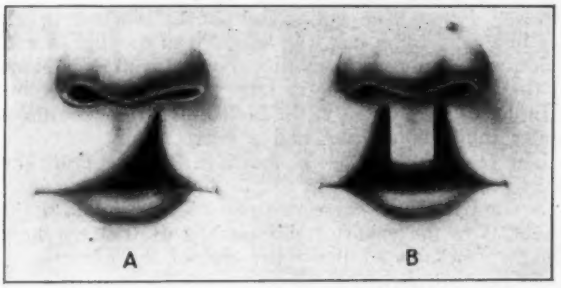

FIG. I.—A. UNILATERAL HARE LIP. B. BILATERAL HARE LIP.

Observe that hare-lip is a lateral cleft, not a median one. Since the intermaxillary bone, the nasal septum, and the median portion of the lip are developed from the same center; and the intermaxillary bone contains the germs of the incisor teeth, the fissure in hare-lip corresponds to the interval between the lateral incisors and the canine teeth. When the fissure extends into the nasal cavity the ala of the nose loses its normal arch and is flattened out. The red border of the lip is not interrupted, but is drawn up into the fissure (see Fig. I.). When the fissure is complete it extends to the mucous lining of the nose. The deformity may consist only of a notch in the upper lip, or it may extend up into the nostril and be associated with a cleft palate. It may be noted in passing that it is more common on the left side. In the case before us the fissure is unilateral and incomplete.

Operation.—*At what age should the operation be performed?* This has been a matter of serious discussion, and it is curious that there should be such a divergence of opinion when the physiological demands point to but one rational conclusion. *The proper time to operate is as soon after birth as possible.* Nothing is gained by delay except the consequences of faulty nutrition. The earlier the operation the more plastic the tissues and the more rapid the repair. The vessels in the newly-born are small, hence the loss of blood is slight; the risk to life trivial.

Early closure of the lip guarantees the normal direction in growth of the intermaxillary bone; an open lip encourages an excessive growth of the intermaxilliary bone in the direction of the opening.

Luckily hare-lip is such an ugly deformity that parents are impelled by feelings of pride to have the defect promptly repaired. The operation as a rule is well borne by children and the mortality is extremely low with modern surgical technique and a rapid operator the dangers of operation are almost nil.

Question—How do you prepare the patient for operation?

Answer—No preparation for operation is necessary. The mucosa is only devitalized by the use of antiseptic fluid. It is necessary only to have the face clean.

The aim of the surgeon in this operation is to restore the lip to its natural form. It might seem that a simple freshening of the edges and closure of the fissure would give a satisfactory cosmetic result, but such is not the case, since the sequel of such a procedure is invariably a notch in the free border of the lip, which remains as evidence of the original deformity. To avoid this a plastic operation is essential, planned to meet the different conditions which each case presents.

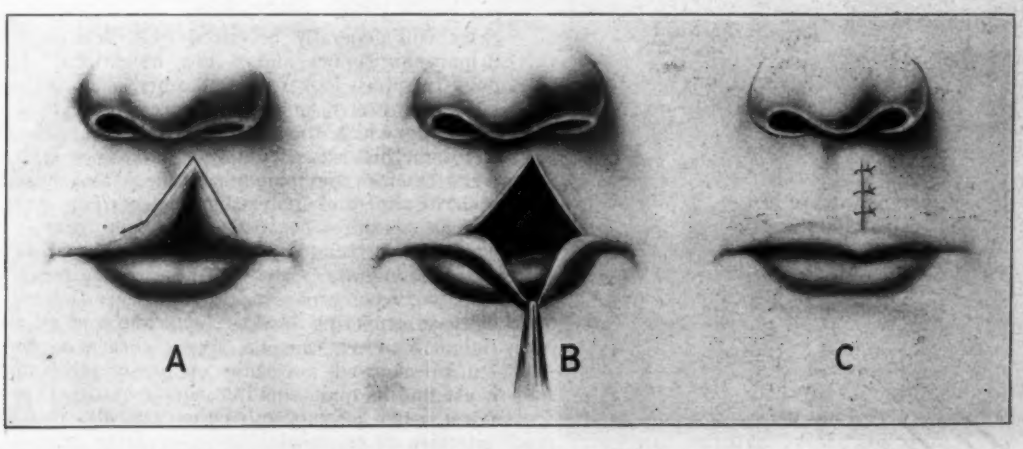

FIG. II.—A. LINE OF INCISION ON EACH SIDE OF THE CLEFT. B. THE TWO FLAPS DRAWN DOWN. C. UNION OF FRESHENED EDGES BY A VERTICAL SUTURE LINE.

In the patient before us we are dealing with a unilateral fissure which extends to, but not into the nose.

You note we are operating without anesthesia for the reason that anesthesia in these very young children is unnecessary, and always dangerous. First, and of prime importance, we free the soft parts from the bone, this is done thoroughly so as to permit the parts to coapt without pulling.

We make our incisions on each side of the cleft from the nose down to the line of the lip, leaving the bases of the flaps attached (Fig. II-A). We now draw down the two flaps with a forceps (Fig. II.-B), and the freshened edges are united by suture so that there will result a normal eminence at the free border of the lip (Fig. II.-C.).

The sutures are of linen and embrace the entire thickness of the lip down to but not including the mucosa. The sutures are tied just tight enough to coapt without compressing the tissues. The wound is dressed with collodion painted over gauze. Whatever operation be devised to meet the needs of the individual case, *the following points should be noted:*

(*a*) Anesthesia in very young patients is not only unnecessary but it is attended with a certain amount of danger. It is quite satisfactory to have the patient's arms covered with a sheet and held by an assistant in the upright position. This position lessens the bleeding and gives the operator an opportunity to observe the lines of the face and plan for the best cosmetic results. Bleeding may be controlled by the fingers of an assistant compressing the coronary arteries if necessary. The use of artery clamps is not advised, since the vitality of the tissues is thus impaired by pressure necrosis. The loss of blood will not be serious if the incisions are exact and executed with rapidity.

(*b*) The first essential step in the operation is to free the soft parts from the bone. This should be done thoroughly so as to permit normal coaptation without any pulling.

(*c*) The incisions should be exact, well defined and present as broad a surface as possible for coaption.

(*d*) The sutures should be of silk or linen thread and embrace the entire thickness of the lip down to but not including the mucosa. *These sutures must not be tied so tight as to cut through or compress the tissues.*

(*e*) Be sure the suture line is so exact that it presents no pockets for the collection and decomposition of food.

After Treatment—A word and a warning should be given in reference to the after treatment. For the first twenty-four hours give only sterile water. It is not a good plan to feed milk until the injured mucosa is sealed up by the products of repair, since milk is a good culture medium for bacteria and the mouth is difficult to cleanse. Milk diet may be given on the second day, always following the feeding by sterile water to wash away the milk remnants.

The dressing should remain in place for seven days when the sutures may be removed.

It is well to protect the wound from the child's fingers by splinting the arms. The habit of sucking the fingers is a menace to perfect results.

In *Bilateral Hare-Lip* the greatest difficulty in closing the fissure is sometimes caused by the protrusion of the intermaxillary bone. If the operation be done early this difficulty will be slight, since the pressure of the lip after closure causes the bone to assume its normal direction. But in neglected cases it may be necessary to force the protruding bone back into the fissure. The projecting intermaxillary bone must be gotten into line so as to be on the same level as the adjacent alveolar borders of the maxillary bones.

It must be remembered that the intermaxillary bone carries the incisor teeth, and that it should be removed only under great provocation. In its absence the upper lip is depressed, and the deformity overcome only by a bridge of teeth. Besides, the removal of this process seriously compromises the development of the nasopharynx, arrests the normal growth of the upper jaw and thus impairs the function of normal respiration and the vital capacity of the individual.

Diabetic Gangrene.

History.—Patient, male, aged sixty-eight, comes to the hospital suffering from gangrene of the foot.

Patient has always enjoyed good health till four years ago when his physician after an examination of the urine told him he had diabetes mellitus. Since then he has been under the supervision of his physician who prescribed a diet to which he has adhered in a general way.

Nine months ago he began to be troubled with cold extremities, and he found relief only by using a hot foot bath at night just before retiring.

Three months ago while bathing in the surf he bruised his little toe. The toe began to swell, caused him intense pain and finally turned black as far as its base. The toe was amputated, but the process continued on to the dorsum of the foot, and the fourth toe became involved. This toe was also amputated and the fourth and fifth metatarsal bones excised at the same operation. In spite of these operations the gangrenous process continues to invade the tissues.

At present the wound of operation shows an area of sloughing tissue, and the tissues on the dorsum of the foot are inflamed. There is no pulse felt in the posterior tibial artery at the ankle.

There are evident sclerotic changes in the arteries, and the urine shows five per cent. sugar present.

Diagnosis.—The history tells the story. To those who have seen a number of such cases it is a familiar story—*a story of crippled tissues and crippled circulation.* Mark the trivial cause which started the conflagration. This patient only bruised the tittle toe—an injury which in normal tissues would pass unnoticed. Observe that it is the *slight injury* which is the starting point; pinching of the toe by the shoe; trimming a corn; a trivial traumatism; these are a fair sample of the character of the injuries which inaugurate a grave pathology.

Comment.—Diabetic gangrene is nothing more than senile gangrene plus the tissues of low vital resistance found in the diabetic. Here we have two factors which when found in combination form a fertile soil for surgical disaster, viz., tissues crippled by the devitalizing influence of diabetes; circulation crippled by the slow but certain obliterating process of arteriosclerosis: hence it is the slight injury that overwhelms the tissues already burdened by age, and enfeebled by toxemia. Here is presented a problem for the most astute surgical judgment.

The first question is, not how shall we save the patient's limb, but what shall we do to save the patient's life. The subsidiary consideration is how much of the limb is it necessary to sacrifice in order to save the patient's life. Already the futility of clipping a small fragment of the extremity is demonstrated. Two toes and two metatarsal bones have already been removed, and still the gangrenous process marches on.

How long will it continue to invade the tissues?

Until amputation is done through tissues amply nourished by a main vessel; this manifestly can be attained only by amputating above the knee, through the lower third of the thigh. To amputate below the knee is only to invite gangrene of the flaps and necessitate ultimately the operation which should be done at first.

Operation.—We shall amputate this leg above the knee, in the lower third of the thigh where we can get a main artery that can be depended upon to maintain the vitality of the flaps. In former times the most skillful operator was he who amputated with the greatest rapidity. Surgeons vied with each other in marvelous feats of rapid dexterity, while the watch was held over them to record perchance the surpassing of all previous performances. The greatest surgeon was the most rapid operator. And the patient—either died of shock, or was rescued from shock after many days of critical convalescence. The modern surgeon never operates by the clock; his one aim is to operate so as to conserve the patient's vital forces. Thanks to the investigations of Crile the cause and prevention of shock have been placed upon a rational basis, and we have now attained a method of operating which eliminates shock, and returns the patient to his bed with vital forces undiminished and undisturbed.

Anesthesia gives us the painless operation, antisepsis the feverless convalescence; but there was one more ideal to attain, and this ideal is the gift of Crile—*the shockless operation.* Having marked out our flaps we shall use Crile's method of "Anoci Association" by infiltrating the skin with novocain; remember we are endeavoring to block the nerves so that during the traumatism of the tissues no impulses shall reach the brain. I shall ask you to watch the record of the patient's pulse which will be announced every five minutes during the operation. The patient starts the operation with a pulse of 96. The pulse will indicate the influence of the operation upon the patient's vital forces.

We now proceed to make our skin flaps, a long anterior and a short posterior flap. The tissue beneath the skin are now infiltrated with novocain, and the parts are carefully incised, each structure being recognized before being cut. On the outer side of the knee we recognize the external popliteal nerve; this is blocked with novocain and then incised. Further toward the middle of the popliteal space we expose the internal popliteal nerve which is likewise blocked with novocain and divided. Beneath the nerve is the vein and artery. Each is first ligated, then divided. The remaining tissues are severed and the leg removed.

Note please that the patient's pulse is now 72. This tells the story. The patient thus far has not lost a dram of blood, and the practice of Crile's anoci association has for the time being disconnected the field of operation from the brain, and hence the elimination of shock.

We now loosen the tourniquet, ligate the smaller vessels, bring the flaps over the stump and suture, placing rubber drainage tubes at the outer and inner angles of the flaps. This has not been a rapid operation; it has taken a half hour to perform it; but what is better, it has been a shockless operation, and the patient is returned to his bed in better condition, as the pulse indicates, than he was before the operation began.

Lane-Kink.

History.—Patient, female, aged twenty-four, enters the hospital complaining of distress in the right iliac region, chronic constipation and general malaise. During the past year she has become extremely melancholy, there is a loss of muscular tone and a good deal of nervous irritability. Two years ago she was operated for chronic appendicitis, but says she was not benefited by the operation.

The *radiograph* shows a somewhat dilated cecum and a distinct sagging of the ileum within a few inches of the ileocecal junction which is strongly suggestive of a "Lane-Kink."

Comment.—This history taken in conjunction with the radiograph, and the fact that the patient was operated for chronic appendicitis two years ago, leads us to suspect that at the previous operation something was overlooked and that the chronic appendicitis did not fully account for the symptomatology.

The history speaks strongly for *intestinal stasis.* Somewhere along the intestinal tube something interferes with the fecal current; there is a damming back of the intestinal contents giving rise to a mild fecalemia, which produces a chronic toxic state, constantly depleting the vital income and responsible in a large measure for that vital involvency expressed by the term neurasthenia.

Besides, the radiograph shows that within a few inches of the ileocecal junction there is a distinct deformity of the ileum which is strongly suggestive of "Lane's Kink." In other words the ileum at this point is ankylosed—held down by adhesions, which produces definite symptoms of obstruction and abdominal distress which often simulate chronic appendicitis.

Operation.—We shall make our incision along the outer border of the right rectus muscle which will give us easy access to the ileocecal region and permit us to enlarge the incision if necessary without weakening the abdominal wall. The cecum presents in the wound. Note that it is somewhat dilated. As we push the cecum upward with laparotomy sponges there is exhibited a beautiful patholocigal picture. Observe the membranous band forming a distinct ligament attached to the terminal portion of the ileum opposite its mesenteric border and anchoring it to the peritoneum of the iliac fossa. This is a fine example of the ileal kink first described by Sir Arbuthnot Lane of London.

Note that these adhesions not only deform the ileum by kinking it but that they perceptibly narrow its lumen at this point (Fig. III). This is the point of obstruc-

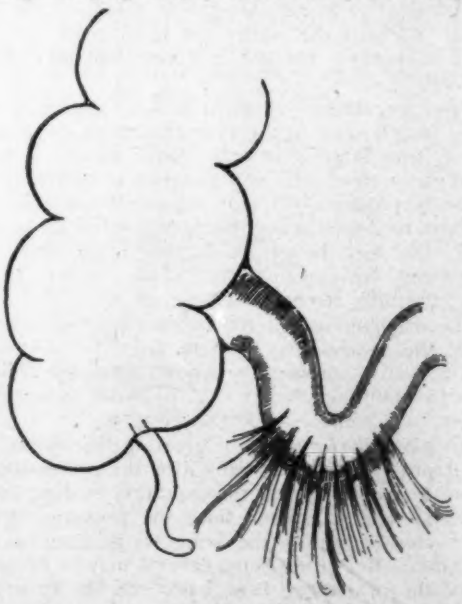

FIG. III.—LANE-KINK.

tion; this rationally accounts for the intestinal stasis and the train of symptoms which follow in the wake of a chronic toxemia.

We shall now sever these membranous bands that anchor the ileum at this point. Observe how the intestine rolls out and assumes its normal relations as the adhesions are cut away. We shall cover the raw surfaces with an omental graft to prevent adhesions reforming and in addition to this we shall place a puckering suture at the ileocecal junction to restore the competency of the ileocecal valve. We have no doubt but that complete relief of symptoms will follow recovery from this operation.

What is the Cause of Lane-Kink?

We do not believe that Lane-Kink explains itself. Somewhere there is a defect for which this peculiar phenomenon is but a compensation. We have made bold to advance the hypothesis that Lane-Kink is the by-product of an incompetent ileocecal valve—that it is an effort on the part of nature to compensate for an incompetent ileocecal valve.

With this hypothesis in mind we began systematically examining the ileocecal valves in our cadavers to determine whether Lane-Kink is an evidence of ileocecal incompetency; for if this is true we are not curing our Lane-Kinks by simply severing the bands of adhesions and straightening out the ileal tube, this is only a preliminary step. If our hypothesis is correct we can only cure Lane-Kink by correcting the incompetent ileocecal valves.

In examining our ileocecal valves we first filled the cecum with water and noted whether under slight pressure there was leakage into the ileum. We then examined the valves and noted the anatomical changes in those which proved incompetent. In the latter group there was atrophy of the valvular segments, retraction, and a sort of disinvagination of the ileal segment (Fig. IV).

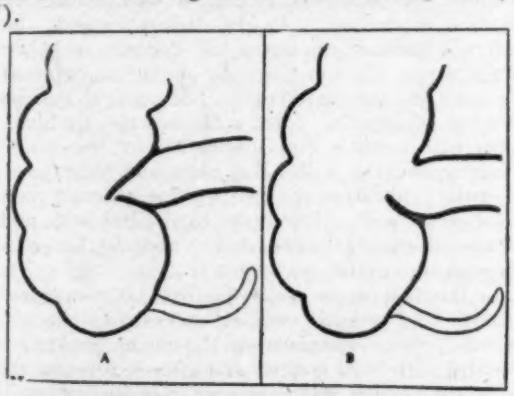

FIG. IV.—A. NORMAL ILEOCECAL VALVE.
B. INCOMPETENT ILEOCECAL VALVE.

In every instance of Lane-Kink we found an incompetent valve; and this, after all, is the most rational explanation of its pathology, for the fluid waste backing up from the cecum into the ileum will influence most markedly the portion of gut nearest the source, i. e., the terminal portion of the ileum. The distended portion of gut will sag down because of its own weight, and a long continued fecal stasis will be followed by a mild infection of the peritoneal covering, producing pseudomembranes or adhesions which ankylose and finally anchor the intestine in a permanent kink.

If our hypothesis is correct, the present treatment of Lane-Kink is futile. There must be a restoration of the function of the ileocecal valve or the kink will return.

394 Clinton Avenue.

TUBERCULOSIS OF THE TESTICLE.*

HENRY H. MORTON, M. D.

CLINICAL PROFESSOR OF GENITO-URINARY DISEASES IN THE LONG ISLAND COLLEGE HOSPITAL; GENITO-URINARY SURGEON TO LONG ISLAND COLLEGE AND KINGS COUNTY HOSPITALS AND THE POLHEMUS MEMORIAL CLINIC, ETC.

Brooklyn, N. Y.

The patient upon whom I will operate to-day had one tubercular testicle removed some months ago. He now has a tubercular epididymitis on the remaining side and he also has a small tumor in the breast under the nipple, which I take to be a metastases of the tubercular process from the testicle. I am going to remove the tumor while he is under the anesthetic, although it is strictly a surgical case, for the reason that it will save him from a second anesthesia. Then I will operate on the testicle.

In removing the tumor from the breast I make a curved incision at its lower border through the skin and dissect back a flap containing the tumor. After it is freed I cut through the upper skin flap and the tumor is thus removed.

The tumor is an infiltrated mass which does not look tuberculous. We will have the pathologist report on it before making a diagnosis.

In operating on the testicle I will cut down and expose it and if possible leave the testicle in, taking out only the diseased epididymis. This is the so-called operation of Epididymectomy.

If we find the body of the testicle is riddled with tuberculous material I will do a castration; but if the testicle looks healthy and does not appear to be involved, I will leave it in for the effect it has on the patient's mentality and virility; the removal of both testicles has a most marked effect on a man's general mental condition, but if we allow one to remain it exerts an influence in causing the patient to retain his masculine characteristics.

I once heard when in the West on a hunting trip a rather interesting fact.

We were traveling through the Rocky Mountains with an outfit of pack horses, and for several days we camped near another party.

In traveling in this way it is the custom to turn the horses loose at night to graze and bring them in to camp in the morning to saddle or pack. We noticed that the horse-wrangler of the other outfit was always able to bring in his horses in the morning without trouble, whereas our horses strayed off, and our horse-wrangler would often be several hours finding them. One night while seated about the campfire I asked the horse-wrangler of the other outfit the reason. He said there was a horse in his string which was originally a stallion. He had been "cut" and his testicles were taken out, but a piece of one of the testicles had been left, so the animal still had some masculine characteristics. One of the characteristics of the stallion is to look after the whole string of horses. He herds them and sees they do not stray away, and this stallion with a small part of one testicle, retained enough of his old fire to keep up the habit which was natural to him of herding the horses. In addition this particular horse would not allow anybody to ride him. He was a "mean horse" and could only be used as a pack horse, because he retained another of the characteristics of the stallion and that is not to be handled by anybody. With a pack on his back cinched tight he would travel along at the head of the outfit behind the man who was leading and he would lead the straggling horses.

*Clinical lecture at Long Island College Hospital, Brooklyn.

From such an operation we can learn from the lower animals something about how to handle our patients and that little incident was rather suggestive to me as to the line of treatment which we ought to follow in these cases of tuberculosis of the epididymis and testicle. In order to retain some of the masculine characteristics and some of the virility it is far better to allow the testicle to remain unless it is diseased. We must take out the epididymis, of course. As I examine the remaining testicle I find it in rather bad shape and we may have to do a complete castration.

I now make my incision through the skin, lift out the testicle and examine it.

There is a small amount of hydrocele fluid and you see here the testicle and here the epididymis, which is riddled with pus. I dissect off the epididymis from the testicle and by very careful palpation of the testicle I assure myself that there are no nodules in it, so that we can venture to save it. I complete the operation by cutting off the vas deferens and bringing its end out from the angle of the wound and close the wound by suture.

Now, do any of you know why I brought the end of vas diferens outside of the wound? What does the vas communicate with?

Answer by Student: The seminal vesicle.

Question by Dr. Morton: Now if the vas communicates with the seminal vesicle what will happen if there is a vent leading down from the seminal vesicle to the outside air?

Answer by Students: Drainage.

By Dr. Morton: That is just what I accomplished. I brought the end of the vas outside the wound so that if there was anything in the seminal vesicle, the contents would drain outside and not into the wound, causing its infection.

We used to have a great deal of trouble with these cases in which we did a castration or an epididymectomy, because a good many of them would be clean at the time of operation and a week or ten days later a little abscess would form in the upper part of the wound and we didn't know why it was. Finally, in reading a paper by Rovsing, of Copenhagen, I found a probable explanation of it. The interior of the seminal vesicles is often filled with pus containing organisms, sometimes tubercle bacilli, sometimes pyogenic organisms. The contents of the seminal vesicle drain down through the vas deferens and if the end of the vas is enclosed in the wound, the secretion from the vesicle drains into the wound, sets up infection and an abscess forms. Rovsing suggested that by taking the vas and bringing it out through the wound this material instead of draining from the seminal vesicle into the wound, would go on the outside. We have pursued that plan and as a consequence we have had very few abscesses since its adoption. It is quite an advantage in the technic.

Tuberculosis of the testicle always begins in the epididymis and the body of the testis becomes affected later. The epididymis may be affected in three ways:

Primarily, in which the tubercle bacilli are introduced into the general circulation and carried to the epdididymis by the spermatic artery and, as in this case, the only evidence of tuberculosis of the body is located in the epididymis.

It may be secondary from deposits in the genito-urinary organs—the seminal vesicles or prostate, in which case the bacilli are carried down through the vas deferens and,

Thirdly, it may occur as the result of a hemotogenous infection from the lungs or kidney. There may be a focus of tuberculosis in the lungs. The bacilli get into the blood circulation and there they are carried to the epididymis through the spermatic artery, or the focus may be in the kidney and the bacilli may be carried to the circulation in the same way.

The course which these cases run is usually very slow. Nodules form in the epididymis and lie there latent. Eventually, they become active, usually as the result of some traumatism or blow, or perhaps nothing happens and they simply light up and coalesce, suppurate, break down and cause inflammatory phenomena about them. Now for a time the process is located in the epididymis and that is the time for prompt action. Later, in three-fourths of the cases after the disease has rested in the epididymis for a time it spreads to the testicle, which breaks down and becomes filled with pus, the pus breaks through the skin and a discharging fistula forms.

In some of these cases which are neglected we see the condition known as fungus testis, which is not at all uncommon. The testicle becomes glued to the skin of the scrotum, the suppurating mass discharges through a necrotic opening of the skin which takes place, and we have a cavity in the testicle which is surrounded by and attached to the adherent skin; then granulations form and grow up through this opening in the skin and we have a great fungating mass growing out from the opening in the testicle and protruding up through the skin. It is not confined to tuberculosis of the testicle alone, for we find the same condition in syphilis of the testicle which has broken down.

Now as to the complications of tuberculosis of the epididymis or testicle. The most common complication which we find is that of hydrocele, usually moderate in amount. Sometimes there may be two or three ounces of fluid in the sac. As the disease extends the vas deferens becomes thickened and deposits of tubercular material take place in the walls of the vas deferens and the cord becomes thickened. The seminal vesicles are affected ultimately. The walls become studded with tubercular nodules and infiltration of the connective tissue around the walls takes place and we have a perivesicular infiltration and the prostate generally becomes involved as well. It becomes hard, filled with nodules, which ultimately break down and discharge either through the urethra or rectum.

In the case upon which we have just operated the prostate and seminal vesicles have already become affected. Rectal examination shows the prostate to be studded with hard nodules and after expressing the pus from the meatus and having it examined microscopically we found tubercle bacilli.

The symptoms and diagnosis may be spoken of briefly. In general, the nodules lie latent for months and if you take hold of the epididymis you will find the head of it to be stony hard and the cord thickened and then some traumatism takes place, and these nodules soften down and break outside through the skin.

Every case which comes to a physician complaining of swelling of the testicle which has lasted for some time and is not due to gonorrhea or which is attributed to some slight effect, such as lifting or a very slight blow, ought to give rise at once to the suspicion of tuberculosis.

If hydrocele is present and obscures the outline of the testicle it is perfectly proper to tap the fluid and

you are thereby able to outline the testicle and you will probably be able to distinguish these hard stony nodules, which are very characteristic in their feeling.

The various tests for tuberculosis are useful. The Von Pirquet is the one which is particularly applicable in these cases. We did the Von Pirquet on this man and got a positive result. If the Von Pirquet is not satisfactory we can make use of the subcutaneous injection of old tuberculin. A rise of temperature indicates the presence of tuberculosis.

The prognosis of these cases is bad if they are left alone. Very, very rarely it happens that the nodules become encapsulated and then fibroid degeneration takes place, but that is so very rare it ought not to be expected and ought not to be looked for. Valuable time is lost in waiting for any such thing to happen, and in the few cases where it does happen it means only a temporary arrest of the process, which lights up again and runs a very rapid course.

The progress of these cases, if left alone, we have a chance to see in neglected cases which come into the hospital. Nodules are first deposited in the epididymis and break down and they slough out and the testicle becomes infected secondarily and that breaks down and sloughs and finally the scrotum becomes filled with a mass of sloughing broken-down tissue with some fibroid, hard, thick scar tissue; so even if a man should object to having his epididymis removed or his testicle taken out, you can tell him that his testicle is now useless and that it will simply be a menace to his general health if it is left in.

Another danger resulting from leaving in a testicle or epididymis with tuberculous nodules is that hematogenous infection of other organs is very likely to occur, or there may be a descending infection of the tubercle bacilli through the vas deferens, infecting the seminal vesicles, and so a man with tuberculosis of the epididymis is living in a most dangerous condition, and even if it does not cause him any trouble it is sure to extend, for it will be carried by the blood to the other organs, the lungs or kidneys, or down to the vas deferens, the prostate and the seminal vesicles, and a man is doomed as long as he has the foci of tuberculosis in his body.

Of course, like all tubercular processes, we may be able to retard caseation, but it is more unsafe to trust to that in the case of tuberculosis of the testicle than in almost anything else. Outdoor life will cure a case of pulmonary tuberculosis if it is gotten at soon enough. It may possibly retard the progress of a tubercular kidney and, of course, it will retard the progress of a case of tubercular epididymitis, if the treatment is properly carried out, but it is too risky to trust to that; so whenever tuberculosis of the testicle or epididymis takes place it means operation just as promptly as it can be done.

The only two operations that are considered are the operation of epididymectomy and castration. Epididymectomy is the operation of choice for the reason that I have explained to you, that it leaves the testicle in and the testicle has a certain effect on the mentality of the individual and upon his masculine characteristics. If epididymectomy or castration be done, the end of the vas ought to be always sewed into the wound as I showed you to-day. Indeed some of the genito-urinary surgeons go so far as to inject with a very fine-pointed syringe a mixture of idoform and glycerin through the vas into the seminal vesicle. They fill the seminal vesicle with the iodoform-glycerin for the purpose of a beneficial effect on any tubercular process which may be going on there. That, however, seems to be a superrefinement of technic.

Castration is, of course, called for in those cases where the body of the testicle has become involved. Where the disease has extended to the body of the testicle, there is no use of trying any palliative operation. It will not retard the activity of the tuberculosis.

The object of the after-treatment in these cases is to prevent recurrences in other organs. The patient should be strongly urged to live an outdoor life and should always remember that he is still a tuberculous subject for several years after all the manifestations of the tuberculous process have ceased.

We cannot do anything in an operative way to help the condition of the prostate and seminal vesicles in this particular case. Operations for tuberculosis of the prostate are useless. We do not accomplish anything and the patient lives longer if he is left alone and no operation is attempted. A few years ago many surgeons tried to remove the prostate, extirpating the seminal vesicles, in cases of tuberculosis, but the difficulty about such an operation is that it makes a very extensive wound which is very slow in healing up and the patient is confined to his bed in the hospital for weeks after the operation is performed and after it is done we have not accomplished very much because we have not been able to remove the focus of tuberculosis. There are still foci which have been left behind and it is very much better in these cases to remove the original focus of infection by epididymectomy, as we usually do, and then trust to the powers of nature. The patient should live an outdoor life and trust to the palliative powers of nature to heal the process in the prostate and seminal vesicles.

Exhibition Cases.

Pyelitis—This is a kidney case upon which I operated two weeks ago. I spoke of it at the time as being an exploratory nephrotomy. We exhausted all other measures in making a diagnosis. We used the radiograph and had used ureteral catheterization and we found pus on one side and clear urine on the other side. We had excluded stones by means of the radiograph. We found no tubercle bacilli in the urines, but we had not used animal inoculation, as the patient did not want to wait so long. Therefore we made a diagnosis of pyelitis of the left side—cause unknown. The patient complained of great paroxysms of severe pain resembling renal colic.

I cut down on the kidney and split it and laid it open like a book and there was nothing the matter with it, neither stone nor tuberculosis. You could see the mucous membrane of the pelvis of the kidney was the seat of a light inflammation and in addition to that, there was a very markedly thickened and adherent capsule. You will remember that at the time I said I could find nothing abnormal about the case except the fact (to which I called your attention) that there was a thickened and adherent capsule. I divided the capsule and separated it from the kidney. The kidney is now without a capsule and I hoped that the separation of the capsule from the kidney would relieve the intracapsular pressure and would stop the attacks of pain which she had.

Question (Addressing Patent): Have you any pain now?

Answer: No, doctor.

It worked. She had some pain for several days after

the operation, but a week after the operation, the pain ceased and she has been free from it for ten days.

My theory of the case is this: in former days, before we used the radiograph, a good many cases were operated on for stone in the kidney where no stone was present. Although no stone was found, the operation seemed to relieve the pain which the patient suffered from and when the wound healed the patient suffered go along and be free from pain afterwards. The explanation for this, however, was not clear at the time. At the present time the idea is that the kidney capsule which has become thickened, is very dense and very inlastic. If the patient has pyelitis, the kidney becomes congested and fills up with blood. It tries to expand, but cannot and in consequence there is a great deal of intracapsular pressure which causes pain by reason of the pressure. By dividing the capsule, splitting it and turning it back on the kidney, the kidney has a chance to expand. When it becomes congested and filled with blood there is nothing to cause pressure. and provoke pain. That is what happened in this case, I think. The wound is almost healed. There is just a small opening and no urine comes out. I had a drainage tube in the pelvis of the kidney and urine drained out freely for sometime, but that has all stopped and she is almost ready to go home now.

The pus in the urine has almost entirely cleared up as a result of the prolonged drainage of the pelvis of the kidney and the bladder washing.

Peracute Urethritis.—This boy was unfortunate. He is, however, better off than he was a day or two ago. He came in here with quantities of pus streaming from under his foreskin, the penis and foreskin swollen, inflammatory and edematous. He was suffering a great deal and there was severe burning on urination.

The question was as to the diagnosis. Had he a gonorrhea or a chancroid, or what had he underneath the prepuce? As we could not retract the prepuce, we could not see ust what he did have. However, Dr. Smith made some smears from the pus which was discharging and found gonococci. That made the diagnosis as far as it went. The boy had a gonorrhea, but we were not sure as to whether or not he had a sore underneath the prepuce. We could not tell because neither the spirochetae nor Ducrey's bacillus can be obtained in that way, but we assumed he had a gonorrhea and treated him along those lines.

Question: In such a case as this, a peracute urethritis, would you use injections?

Answer by Students: No injections.

I am glad to hear that. Where you get such an acute case as this the usual injections are contraindicated.

Question: What would be the treatment?

Answer by Student: Rest in bed and a bland diet. Also give him sandalwood oil and hot sitz baths.

We put him to bed, gave him a bland diet and sandalwood oil and it has acted very well. Sandalwood oil has been spoken of as the "opium of the bladder." It alleviates the burning urination and has a little effect in shortening the duration of the disease, although not a great deal, but it is more useful as a palliative to alleviate the burning urination. He had sandalwood oil internally, hot sitz baths and then for local treatment the penis was wrapped up in liquor alumini acetatis and we kept that on all the time except when in the sitz bath. The result has been very gratifying. He is now in a very comfortable condition. In a few days more the swelling will go down and then we will be able to begin with injections of protargol or albargin.

I am glad to be able to show this case because it is one where injections are absolutely contraindicated. Most of our cases are treated with injections, but now and then we get a violent inflammatory case where the use of injections is absolutely wrong and it is just as well to bear this case in mind because when you get such a case as this you will know what to do with it and you will not do the patient any harm by treating him conservatively along the proper lines.

Necrosis of the Radius.—In this case the man had a chancre four and a half years ago. He had no pain and no symptoms. He was treated a little, but neglected it and that you will find to be the case in nearly every severe tertiary lesion of syphilis. When the patient had the chancre he also had a sore throat. He has no recollection of a rash or grandular enlargement or sores in the mouth.

In June, 1914, he began to have pain in his left forearm. Shortly thereafter he went to Dr. Langstaff, who incised the swelling, made the diagnosis of syphilitic periostitis. Ever since then the sore has discharged. The patient now presents a deep necrotic abscess in his ulna which has gone almost through the bone.

The man has no manifestations at all except that he is thin, emaciated and cachectic looking, and here is this opening in the bone. Involvement of the bone is not at all uncommon as a tertiary manifestation of syphilis. A periostitis starts and then necrosis takes place. The necrosis may be either superficial or go through the shaft of the bone, as is probably the case in this particular instance. It is all denuded here as I touch with the probe.

The question arose as to whether it would be better to operate on this man and remove the sequestrum now and then follow up the operation with active syphilitic treatment, or whether we had better use the syphilitic treatment first and operate later. I asked Dr. Rushmore to see the man and give us the benefit of his opinion and yesterday he advised commencing very active treatment with salvarsan, mercury and iodides and wait until the sequestrum had separated and then it could be easily removed. Accordingly, we started the man off on inunctions of mercury and increasing doses of iodid of potash. We would like to use salvarsan on him, but on account of the war in Europe salvarsan is hard to get, but we will have some shortly as I have just learned that a ship has just arrived with some aboard. When we get a supply we will put the man on salvarsan at once.

32 Schermerhorn St.

Army Medical Corps Examinations.

The Surgeon General of the Army announces that preliminary examinations for appointment of first lieutenants in the Army Medical Corps will be held on January 11, 1915, at points to be hereafter designated.

Full information concerning these examinations can be procured upon application to the "Surgeon General, United States Army, Washington, D. C." The applicant must be a citizen of the United States, between 22 and 30 years of age, graduate of a medical school legally authorized to confer the degree of doctor of medicine, of good moral character and habits, and shall have had at least one year's hospital training. The examinations will be held simultaneously throughout the country at points where boards can be convened.

Applications must be completed and in possession of the Adjutant General at least three weeks before the date of examination. There are at present twenty vacancies in the Medical Corps of the Army.

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NEW YORK, DECEMBER, 1914.

The Home Hospital.

The medical profession, constructive sociologists, and society in general owe a debt of deepest gratitude to the New York Association for Improving the Condition of the Poor for its demonstration at the Home Hospital that the cure of tuberculosis is in the main dependent upon the cure of poverty. While we have held this to be so as an axiomatic truth, and have been able to marshal some proofs of it, it has remained for the Association to carry out a carefully conceived plan aimed to test thoroughly the soundness of the proposition that society must regulate its housing conditions and the wages of its families if it seriously contemplates the prevention of tuberculosis.

What the Association has done has been to treat both the poverty and the tuberculosis in sixty-four families over a period of two years, at an expense of $61,932.96, of which $12,313.06 was earned and contributed by the breadwinners of the families supervised. The per capita per diem cost of caring for patients in the Home Hospital has been exceptionally low as compared with that of any existing sanatorium or hospital—and the medical and moral results have averaged better than those which institutional care has been able to show. The Association not only has given the patient himself the best of care but has held the family together and maintained decent standards of living for all concerned. It can readily be seen how the psychological factor must have operated for good in this wonderful experiment—the idea and organization plans of which originated in the mind of Charities Commissioner Kingsbury—for good food, proper clothing, a sanitary home and skilled medical attendance were guaranteed to the handicapped victims. Where the tuberculous breadwinner's earnings fell short, the Association stepped in and made up the difference. Therefore were the homes happy, want, worry and anxiety being banished.

Of the 315 persons concerned, 207 were patients and 108 family members. All the families improved in health and their average weekly earning capacity increased from six to fifteen dollars. No new cases developed among these people during the two years of the experiment.

This reads like "A Christmas Carol" reduced to actuality. It is better than all the talk in the world. We have been affirming for a long time everything that the experiment has demonstrated but we have felt as did Copernicus about his merely abstract theory of the solar system. Now we can feel as Galileo did when he actually saw through his crude "telescope" Jupiter's revolving moons. When theory resolves into fact men set themselves to logical tasks. The logical task for human society in the coming century is the cure of poverty. An experiment of the sort described in this editorial brings us vastly nearer the goal of social decency. It does not tell us what the cure is, but it quickens constructive thought, for it has *applied* a vision. The Utopias have failed because they could not be demonstrated; they have, indeed, been undemonstrable.

Piers Plowman, in fourteenth-century England, saw a vision in which the then shockingly oppressed and brutalized peasantry were relieved of their exploitations. Demonstrations slowly followed down the centuries, proving the great and shadowy dream sound and applicable, until in time the yeomanry of England emerged. Medical writers have haltingly voiced of late, and earnest sociologists have seriously considered, pleas for a better social order than that we know—a social order in which no one would dream of persecuting the consumptive and making a pariah of him, as is now too frequently done, but in which few cases of consumption would occur, and those be lovingly cared for under decent economic conditions. What we know as the Crusade against tuberculosis must change radically in principles and in form, for a mighty demonstration of the soundness and applicability of our contemned medical dreamers' visions has been given.

When we shall cease to have poverty, and charity, and tuberculosis, we shall cease to have war—and not before. The mind attuned to any one of these anachronisms is attuned to all, and therein lies the reason for our laggings in the fetid marshes that skirt the highway of the centuries.

The knights who sought the Holy Grail had no more inspiring mission than the workers of to-day whose high commission charges them to rout the forces of social indecency in whose slimy trail the bacillus of Koch finds such an excellent culture medium. medium.

Governor Glynn: An Acknowledgment.

The medical profession should hold Governor Glynn in lasting remembrance for several reasons. In the first place he vetoed two acts to amend the public health law which had been *passed* by the Legislature, which acts, if they had gone into effect, would have let down the bars to a horde of irregular practitioners and demolished the public health law in relation to the legitimate practice of medicine. Then he showed a

very clear insight into freak propositions affecting the profession, as well as a perfect understanding of our standards and ideals. In a recent address *to* physicians he said: "The standards must be elevated and not lowered or broken down, and I urge you to assist in maintaining and elevating the educational standards required for the practice of medicine." As showing further how he felt about us we quote the following, with the hope that his words will be taken to heart and lead to proper action: "You have something to do yourselves. I do not want to scold or to chide you, but when I think how many physicians there are in this State, more than 15,000 of them, with all their influence and knowing the value of maintaining the medical standards of the State, and remember that you were sleeping and dormant while cults were forcing those bills through the Legislature, I feel that you almost deserve that such measures should have become laws. Those laws should not have been allowed to get to the Executive Chamber. It wasn't fair to the Governor to allow them to come and it wasn't fair to yourselves to allow them to come. I suppose you have a legislative committee. Well, if you have—make it bigger, busier and better, and protect yourselves." What stronger and wiser words have ever been addressed to us? They are severe, but for that we should be thankful. We need castigation for our remissness.

In the days to come the barbarians will renew their annual attacks on the Legislature, as of yore. Can we not profit by Governor Glynn's sane advice and take better care of our interests hereafter. Let us not lie back and leave all to Mr. Whitman, for while he can be depended upon to share our own feelings regarding high standards, we must not forget Governor Glynn's words anent the unfairness of allowing these freak bills to get as far as the Executive Chamber.

Race Suicide and War.

The advocates of neo-Malthusian principles see in their application a force against war. We are assurred that the regulation of the size of families practised in Holland and countenanced by the government has resulted in nothing but good. There is a good deal of difference between the carnage of war and rational control of the population, with much to be said in favor of the latter alternative. A recent writer reminds us forcibly that in forbidding neo-Malthusiasm we are nevertheless obliged to revert to what he calls Old Testament remedies—fire and sword.

When on this subject something must always be said about prosperous France. We decline to join the ranks of the pessimists and agree with Bateson that to infer that because a nation's population is declining that nation must be in a decline may be entirely wrong. The progress of a new nation, occupying sparsely settled territory, may properly be measured by the birth-rate, but not necessarily that of an old and superior nation. Constant increase may be very undesirable. "Desire not a multitude of unprofitable children," said Jesus, son of Sirach. Bateson argues as follows: "In normal, stable conditions population is stationary. The laity never appreciates, what is so clear to a biologist, that the last century and a quarter, corresponding with the great rise in population, has been an altogether exceptional period. To our species this period has been what its early years in Australia were to the rabbit. The exploitation of energy-capital of the earth in coal, development of the new countries, and the consequent pouring of food into Europe, the application of antiseptics, these are the things that have enabled the human population to increase. I do not doubt that if population were more evenly spread over the earth it might increase very much more; but the essential fact is that under any stable conditions a limit must be reached."

The time would seem to be coming when the superior intelligence and real soundness of a State will be gauged by its birth-rate in a manner totally different from that now fashionable on the part of our numerous alarmists. Now the chief argument on the part of French economists for an increase in the birthrate is frankly based upon the demands of war. Certainly this makes no appeal to the idealist. Surplus population makes the savagery of war only the more possible. It is not too much to say that social stability and peace will not be attainable until the great nations learn to keep their populations within bounds. When they become intelligent enough to do that they will have become intelligent enough not to wage war or seek colonial aggrandizement at the expense of weaker peoples. And then also the industrial exploitation which is only another form of war will be restrained. So far as we can see the bulk of our surplus populations are consecrated to the factory (including hundreds of thousands of children under sixteen years of age) and the army. The progress of a nation ought to be measured in a better way than by industrial and military statistics, and by a huge birth-rate. Lastly, our inability fully to cope with the problems of disease and education, and the crushing of spiritual, artistic and literary aspirations in the swirl of economic pressure, are closely related to the ever-increasing masses of handicapped humanity. We are in a state of society in which it is not alone the defective who is ironed out. Alcoholism, insanity, the high cost of living and many other evils are the fruit of our mad social standards. So long as mere numbers, the deified dollar, and industrial and military prowess are our gauges of progress, so long will social decency remain a dream and Christianity be constituted of a tissue of affected phrases and sentiments.

The Socialization Fanatics.

Certain eminent gentlemen, obsessed by a desire to see the American profession socialized, more or less after the British mode, are at considerable pains to blackguard some of their fellows. If, in order to make out a good case for socialization, it is necessary to proceed after this fashion, we are bound to declare that our aversion to the proposed reorganization is only deepened and strengthened. These vilifiers contend that many practitioners are driven, under the present system of private practice, to resort to expedients for making money that are little short of criminal in the main, sometimes passing the dead line. The induction of abortion is cited as one of the offences. Crimes are being committed for economic considerations, these critics aver. Now it is not our belief that the criminally inclined will be regenerated by the mere institution of socialization. Doctors do not commit crime, or near-crime, because they are poor. As a class physicians have always been relatively poor, and it is a new view to claim that our derelictions grow out of our poverty. To make moral decency depend, not upon fundamental good character, but upon riches, is a vicious preachment. Simply being poor does not make criminals out of educated and morally clean men. What a standard to set up! The wrongdoers would not be professional assets under any dispensation. If a thousand dollars a year from the government can make a potential abortionist behave himself we know far less than we think we do about inherently twisted human nature. This lit-

tle addition to the income of the crooked is not going to hamper their ingenuity in evil ways and devices. Character is character, and no matter what system is set up the charlatans, frauds and crooks will still be with us. How that character shall be realized among professional men will never depend upon money considerations. And we must not forget the demoralizations inherent in this socialization scheme itself. It would be a levelling down process, and would make of free medical men nothing but a constabulary, politically enslaved and scientifically mediocre. The splendid and peculiar professional caste now attainable by worthy men would be a thing of the past, unless perchance they were fortunate enough to avoid enslavement. Whatever evils we now suffer under would be as nothing in comparison with the debauchment that would follow the institution in this country of a socialized profession. It is one thing to argue for the creation of a sanitary police as one arm of the government, but it is quite another thing to postulate the socialization of the entire profession. That way lies the interment of the best traditions and ideals of medicine.

It behooves us to think clearly on this subject and to resist strongly the growing tendency of social forces to regulate the life of the citizen minutely, indeed to control it from the cradle to the grave. The doctor is in actual danger of being "drilled and subordinated to accept a place assigned to him in a medical bureaucracy." (Editorial *New York Medical Journal*, August 8, 1914.)

In the same article from which the foregoing quotation was taken it is pointed out that the English medical societies are now chiefly occupied with politics, quarrels over the division of allotted appropriations under the National Insurance Act, and acrimonious replies to members of insurance committees, who aver that the panel doctors are guilty of excessive prescribing and that they encourage malingering, and unlawfully charge the insured for medicines dispensed. Medicopolitical work occupies the whole attention of the panel doctors, and their societies hold no scientific meetings. The full application of the Act will place about four-fifths of the population under its provisions, and the English profession realizes that it faces utter demoralization. The National Medical Union, organized in June to resist such demoralization, is on record as maintaining that a State medical service is necessary only for the genuinely necessitous classes, and is pledged to defend the freedom and economic interests of the profession. May they succeed, and may the English experience teach us much.

"That government governs best which governs least." So Americans once thought. Once upon a time a multiplicity of laws interfering inquisitorially in all our private and public actions would have been resented, or rather not tolerated. But for a long time now we have been piling up legislation, influenced latterly by imported socialistic ideas really foreign to the genius of American institutions. Along with our foreign immigration have come new political notions bearing upon panaceas with which the Anglo-Saxon world should have no sympathy. Yet as that world has taken its religion from Orientals, so it is in danger of taking its governmental policies from foreigners, many of whom, although Europeans in a sense, are of remote Oriental origin. Bureaucratic debauchment looms upon us. Upon the mass of enslaving laws in process of formulation and enforcement may easily be founded the greater and more thorough slavery of socialism, just as the trusts have been unwittingly built up in order that governmental ownership and operation may more easily ultimately ensue.

Medical Editorial Table

Why Not an Exchange of Medical Teachers?

For several years some of our universities have been exchanging professors for certain periods with universities abroad. Students in such universities have the opportunity not only of meeting and getting acquainted with foreign university teachers, but also of obtaining instruction under the methods and with the interpretations used abroad. Not only the student but the university also is undoubtedly benefited by this exchange of teachers. Would it not be worth while for medical schools to consider the adoption of a similar procedure? Medical teachers and investigators from Europe are frequent visitors in this country. The arrangement would result in closer relationships between the medical teachers of this and other countries that would undoubtedly be mutually beneficial. Precedents have been set by the School of Medicine of Leland Stanford University, by Johns Hopkins, and by Harvard. Pending the settlement of the war, benefit would result from a similar exchange system between the high grade medical schools at home. Such an exchange could be easily arranged. This would bring teachers of the different medical schools into closer sympathy, and improved methods of teaching would be more widely adopted and faulty methods corrected. Incidentally, but perhaps of most importance, the students of all medical schools participating in such an exchange would obtain a more uniformly thorough training in the latest and most improved methods of investigation, of diagnosis and of treatment.—(*J. A. M. A.*, Oct. 24, 1914.)

The Clinical Varieties of Uremia.

At the same time that there has been an increase in our knowledge regarding the pathological and chemical aspects of uremia, there has also been progress in respect to a sharper delineation of the clinical types. Emil Reiss describes three distinct types of uremia and one mixed type. The latter comprises the majority of all the cases, presenting symptoms belonging to two or more of the first three groups, which three are, respectively, the asthenic, the convulsive or epileptiform, and the psychotic. Asthenic uremia is characterized by somnolence and indifference, by fatigue, syncope and sudden death from failure of the heart. It is probable that the retention of nitrogenous derivatives ordinarily excreted is responsible for this type. The epileptiform type is characterized by eclamptic seizures which resemble those of genuine epilepsy. The aphasias and paralyses of uremia probably belong to this category. The urinary secretion is adequate. The substances that evoke this type are not the result of a retention caused by a deficient excretory capacity of the kidneys. The psychotic type is distinguished by psychic changes, such as mental confusion, delusions and hallucinations, and finally by deep and not simply agonal coma. The above states are usually transient. There is no evidence of the retention of normal metabolic products, and the origin and nature of the toxic substances are still veiled in obscurity.—(*Medical Record*, Oct. 31, 1914.)

Vulvovaginitis in Children.

This affection is coming to be recognized as a formidable malady. Institutional epidemics occur frequently and it is prevalent among little school girls everywhere. In the vast majority the condition is a gonococcic infection, although a few cases are due to a catarrhal state depending upon the presence of thread

worms or on the debilitated condition of scrofulous or tuberculous children. Taussig believes that the most frequent means of infection is from child to child, through the school lavatory. In institutions the hand of the nurse and the bath may at times be responsible. He does not think that transmission is common through cloths. Barnett applies Lugol's solution to the cervix and vaginal walls through the Kelly endoscope. This is done three times a week, and one to 10,000 permanganate douches given daily by the mother after suitable instruction. A soft rubber catheter is used for this purpose, introduced as far as possible. Taussig employs two and even four per cent. silver nitrate solutions, injections being made with the ordinary small rubber tipped urethral syringe. The most important thing in the way of prophylaxis is the adoption in the water closet of a U shaped seat, with low bowl. In this disease an ounce of prevention is worth many pounds of cure.—(*New York Med. Jour.*, Oct. 10, 1914.)

Miscellany

CONDUCTED BY ARTHUR C. JACOBSON, M. D.

Some of our social philosophers have seized hold of Jacques Loeb's conclusions regarding the movements of bees, aphides and certain crustaceans toward a source of light, as having a possible bearing on some of our fanatics. This heliotropism, it will be remembered, Loeb ascribes to physico-chemical reactions, volition not figuring as an element in the phenomenon. So the conduct of some of our fanatics is said to be determined by mechanistic processes of like involuntary kind. The internal secretions are supposed to play a part in these matters. The susceptible victim is "exposed" to an idea and is sensitized by it. Successive exposures render the sufferers more and more sensitive until finally fanatical aberration ensues. A kind of psycho-catalytic anaphylaxis appears to be involved. The helpless patients become slaves to certain ideas, such as peace propaganda, progressivism in politics, socialism, anarchy, prohibition, militancy, eugenics and free love. The possible bearings of this theory upon paranoia suggest themselves.

It is the charlatan and the tin horn scientist who rush into the newspapers, magazines and medical journals with their half-baked and trivial contributions. It is a relatively small and useless individual who feverishly foists his "discoveries" upon any audience, for fear that some one may anticipate his vapid "announcement." But a Kepler writes in the preface of his *Welthar-monik:* "Whether this book is to be read by contemporaries or by posterity, I care not; it can wait for readers thousands of years, seeing that God himself waited six thousand years for some one to contemplate his work." And a Francis Thompson, with his profound message, could write:

"I hang 'mid men my needless head,
And my fruit is dreams, as theirs' is bread:
The goodly men and the sun-hazed sleeper
Time shall reap, but after the reaper
The world shall glean of me, me the sleeper."

The great Mendel did his work quietly in his little garden and died with no recognition whatsoever. This man, whose discoveries were so momentous, seems to have utterly lacked the self-projecting spirit, so far as his immediate environment was concerned. Being for all time, what signified the delay of a few years? So great were his discoveries, and so near was he to his contemporaries, that both he and his contributions were missed completely. And then, as the writer has pointed out in another place, he was so far in advance of his time that the science of his day was not ready to move up to him. He was far beyond Darwinism when the energies of scientists were all taken up with it, unable, seemingly, to assimilate anything else or even to see dimly the significance of his contribution.

The prevention of conception in the face of economic pressure is an expedient forced upon intelligent people, but it would be better if the social order could be decently adapted to the natural biological and spiritual destiny of mankind. We are compromising with economic abuses when we meet them in this way and making their ultimate reformation more remote. What will we do when, after adapting ourselves to onerous conditions instead of adapting them to us, we find that we have been merely conserving our economic Frankenstein and that our policy has really initiated further strains and forces that threaten more than ever our dwindling families? And what about the only child, whom Brill has shown up in a very bad light? Is the prevention of conception doctrine a boomerang in practice? Forceful and sincere men of action who are advocating the application of this doctrine are winning personal prominence and many families are enjoying temporary benefits in a grinding age, but this is altogether apart from fundamental considerations.

The twilight sleep is merely another illustration of certain people's determination not to endure any pain, or, one might say, of their inabilty to endure any. In response to their need we elaborate the twilight sleep. The human race has possessed enough fortitude to get along without this particular refinement until the present year of grace. Our soft, decadent society shows no tendency to dodge those things which ought to be hard on the conscience. They haven't much conscience, but they are frightfully tender physically. Heine said: "Psychical pain is more easily borne than physical; and if I had my choice between a bad conscience and a bad tooth, I should choose the former." Now, as a matter of fact, we don't believe that this statement is true. Psychical pain is a far more severe thing than physical pain, but you don't feel psychical pain if you are a moral defective. We notice that the psychical suffering of moral defectives begins when they are in danger of apprehension and punishment. Such people would suffer hardly at all if they could "get away" with their misdoings. Normal people suffer psychically irrespective of the nearness of the police.

Our various timidities are making us afraid to live. The great aims are contentment, comfort, freedom from worry, security against jars and stresses, the decrease of exposure to accident of all kinds, and the avoidance of any degree of fatigue. We judge civilization by the degree of attainment of these things. This is the real reason why so many people talk but will not act. Action involves worries, trials, dangers. So we find a Rev. John Holmes preaching a kind of sugar-coated anarchy but doing absolutely nothing in the way of action. On the other hand, a Bouck White performs an act—simple, mild, well-meaning—and is promptly made to feel the weight of the community's resentment.

"As it is with the people, so it is with the priests," says Isaiah. So physicians and clergymen are put to it in these delicate days of timid respectability and feeble fortitude to preserve psychical and physical comfort at all hazards. Disturb this comfort in the name of racial progress at your peril. Invent a stimulating

but harmless pulpit style, if you are a clergyman, or a new method of anesthesia, if you are a physician, and society will call you blessed.

Age of psychical comfort and physical anesthesia, Hail!

The petty czar of the operating room and ward, do we not know him well? A letter to the editor of the *Modern Hospital* (July, 1914) describes the breed:

"We have a man on our hospital staff who is objectionable to everybody—to the other doctors, the nurses, internes, and everybody who has to work with him. But he is so strong socially and in a business way—and professionally, too—because he is a good doctor, that the board is afraid to drop him or even to call him down, even for his brutality to the nurses. Is there any way we can get rid of this man?"

We all know the type. He is the man who throws instruments around the operating room and swears (not always under his breath) and blusters during his operations. He can't do anything without tyrannizing over everybody. His private grouches are vented upon the heads of defenceless associates and patients. No man in such a state of mind is fit to operate or take any care of the sick, no matter what his attainments. He is a nuisance and a bore and unfit to exercise authority. Czarism and impatience are not the qualities of which great administrative powers are composed, and the men characterized by them ought to be eliminated in some way from the hospital's personnel at least. Bullyragging has no place in modern scientific work.

Choreic girls lose their chorea when engaged in Greek dancing, as practised, for example, at Barnard College. It is simply impossible, they say, to do these dances and twitch at the same time. The rhythmic movements seem to absorb all the abnormal motor impulses. They seem to act in a manner akin to singing in the case of the stutterer. Why should not useful therapeutic results obtain from intensive employment of dancing in the treatment of chorea?

A common type of coffee headache is the one which the coffee fiend wakes up with, and which may pass away after the victim has bestirred himself for an hour or two, or after more coffee is taken. Probably the cause of this type of headache resides in variations of cerebral blood-pressure. The headache coincides with a low pressure, the natural aftermath of the initial high pressure. The condition is analogous to the cerebral effects of nitroglycerin. It is often hard to convince these people that the abuse of coffee is responsible for their ailments, which comprise, in addition to headaches, depression, irascibility, neuritic symptoms, insomnia of varying types, afternoon sleepiness, and *hyperchlorhydria*. Of course, it is the neurasthenic or the neurotic who exhibits most of these effects. And the giving up of the drug habit means a period of wretchedness before the re-establishment of nervous equilibrium. This inevitable depression, following upon relinquishment of the habit, is the surest proof that the victim has unconsciously and innocently been under the thraldom of one of our most powerful nerve stimulants. It is our conviction that this common feature of American life bears a very definite relationship to much nervous morbidity, a relationship often unsuspected.

Some people undoubtedly bathe too much. We second everything that Sir Almroth Wright has said on this point. It is the neurasthenic particularly who is harmed by excessive bathing. We have very often seen babies suffering from malnutrition improve at once when the daily bath was interdicted. We are not decrying in the least rational hydrotherapeutic measures, which rest to-day upon a thoroughly established basis. But if in neurasthenia the element of exhaustion is added to by the daily bath, what is to be gained by regulation of the patient's other modes of living, medication, etc.? You pull your patient up a peg, whereupon the modern Sisyphus pulls himself down a peg and a half.

It is the hot bath, however taken, whether followed by a cold plunge or shower or not, that we single out for special anathema, but this is not to say that daily cold bathing has our endorsement. The neurasthenic must be kept out of the tub until outraged Hygeia demands a lathering.

And how common it is to see even vigorous persons wondering why it is, after boxing or handball, that they feel "all in." It is the hot bath that "knocks 'em."

Special Article

THE DAMMERSCHLAF IN LABOR.

Public interest in the Freiburg "twilight sleep" has been aroused by the publication in a popular magazine of a somewhat fantastic presentation of scopolamin-narcophin seminarcosis, as practiced by Gauss and Krönig. Like many magazine articles it gave only the favorable side and carried the impression that the method is not well known on this side of the Atlantic, an idea quite foreign to the real facts. The *Journal A. M. A.* succinctly tells the true story:

"The public would think this method of analgesia was something new. As a matter of fact hyoscin and morphin were used over twelve years ago, and was put to a pretty thorough test, especially in Germany. While it is not altogether obsolete, it has been practically discarded. Even the most enthusiastic have emphasized its danger and have stated that it should not be used except in hospitals where constant careful watching is possible. By the Freiburg method one dose of morphin is given, whereas the scopolamin is repeated as indicated, the indication being not pain but memory. Steinbüchel, of Graz, began with small doses and increased the dosage; result, serious consequences, particularly death of infants. In 1907, a special technic was elaborated by Gauss. Technic: The object aimed at is to make woman forget her pains, although she may be conscious of them at the time, twilight slumber—(Dämmerschlaf) is produced. In order to test the mental condition of patient she is shown some object, and after an interval of about an half hour, this object is again called to her attention. If she remembers having seen it before, she is not sufficiently amnesic, and an additional dose of scopolamin is given. Let it be emphasized that a single dose of morphia is given, and in this way the frightful mortality of infants is eliminated."

The *Journal* adds that: "Scopolamin also has its dangers; small doses sometimes produce serious results, as great disturbance of nervous system, of heart and lungs. Furthermore, it is impossible to predict serious complications so they cannot be guarded against." Steinbüchel undoubtedly originated the method in 1902 and it has been popularized by the Freiburg obsetetricians.

It is interesting to quote the opinions of American obestetricians, in addition to the contributions from some of the leading authorities in this country, which will be found on another page of this issue of the MEDICAL TIMES.

Newell, of Boston, employed the method in 112 cases in 1907, but abandoned it on account of the frequency of asphyxiation of the babies. MacPherson of New York had a similar experience in 1908. At the meeting of the American Association of Obstetricians and Gynecologists, Sept. 17, 1914, James A. Harrar and Ross McPherson of the New York Lying-In Hospital, presented their experiences with scopolamin-narcophin narcoosis. (*Am. Jour. Obst.*, Oct., 1914). They note that despite the favorable reports of Gauss, Krönig and Mansfield, Steffens and Hocheisen strongly opposed its use after trial in 300 cases, and Leopold and Veit soon gave it up as dangerous. Frequent asphyxia and death of infants, with atonic postpartum hemorrhage and prolongation of labor, were the bad results reported. The final verdict was; the method did not accomplish the desired results; it could not be regarded as harmless for mother and child, and it was not to be recommended in private practice, as the by-effects liable to develop made it necessary that medical aid could be summoned at any moment.

The subject was dropped for six years by most obstetricians until Krönig again called the attention of the profession to its value. Then the authors made another trial of the method in following more closely the technic of Krönig and Gauss. According to this technic the treatment is not started until the pains occur regularly, every four to five minutes, and last at least thirty seconds. The first injection consists of 0.00045 (1/150 gr.) of scopolamin hydrobromid combined with 0.03 (½ gr.) of narcophin. Three-quarters of an hour after the first injection a second injection is given consisting of 0.00045 (1/150 gr.) scopolamin alone. Thus far the dosage is empirical and standard. The further dosage varies for each patient, and depends entirely upon repeated tests of memory. The authors observe that besides its slight analgesic action in combination with small doses of narcophin, scopolamin has the peculiar quality of producing prolonged interruptions in the mental associations. Based upon this action the psychological test of the patient's memory is the most accurate guide to the dosage required in a particular case. Some women require much less than others. It is quite simple to keep repeating very small doses of scopolamin and get results as to complete amnesia. But herein lie the dangers of the method, asphyxia of the child, prolonged labor, and atonic relaxation of the uterus. It is most important to secure amnesia with the minimal dose for each case. Quantity given must be regulated by the memory test, and Gauss insists that the success of the treatment stands or falls by the observations of this one test. Half an hour after the second dose the woman is asked whether she has had an injection, how many, and where. Even if the memory is retained no new dose is given, but twice more at intervals of half an hour her memory is tested again. If the memory is still retained, a third injection of scopolamin, 0.0003 or less, is given. Further injections depend upon whether the memory is retained, dubious or lost. Abolition of memory is the result desired. It requires the nicest judgment to suit the test to the standard of the intelligence of a given case. The patient is drowsy and sleeps lightly between her pains. When a pain occurs she manifests her suffering to a greater or less degree and again dozes. But consciousness is not entirely lost. Krönig lays great stress upon maintaining a condition of semi-unconsciousness, wherein the pains though apparently perceived are nevertheless immediately forgotten. The patient perceives a pain but she does not appreciate it. The patient may complain that the treatment is not working, yet half an hour after the birth have absolutely no recollection of her pains or of the coming of her baby even in cases in which no anesthetic is given. The authors found it a distinct advantage to administer a few whiffs of chloroform or ether as the head escapes over the perineum, as this last pain may be so acute as to remain fixed in the patient's attention, and the whole treatment fail. Thirty minutes after the birth of the child the woman is asked whether she has been delivered, and in the majority of cases she has actually no remembrance of the birth process

Harrar and MacPherson report results in 100 cases. Krönig claims complete amnesia covering the duration of labor in 80 per cent. of cases. The authors secured complete amnesia in sixty-six women; and partial amnesia, hazy recollection with distinct alleviation of the patient's suffering in ten. Of the remaining twenty-four, twenty did not respond to the drug at all, and four were too far advanced in labor to derive any benefit. It is noteworthy that practically all of the successful cases were those in which the treatment was started three to seven hours before the terminations of labor.

The disadvantages claimed by those opposing the treatment are fetal asphyxia and postpartum hemorrhage, objections which result from improper technic. In the 100 primiparæ delivered without the use of scopolamin by Harrar and MacPherson there were two instances of postpartum hemorrhage so profuse as to require packing and moderate hemorrhage thirteen times. In the 100 scopolamin cases there were two instances of rather severe hemorrhage, controlled without packing, and eight cases of moderate bleeding. The tendency to hemorrhage seemed to be less.

In the hundred delivered without scopolamin there were seven instances of asphyxia at birth, two of them requiring tubs and artificial respiration for twenty minutes. In the scopolamin babies the majority cried at once, eight were moderately apneic, but responded promptly to flagellation and tubs, and two required artificial respiration for fifteen and twenty minutes. The asphyxia that occurred was in those cases where there was delay of the head on the perineum. Under the old technic the frequent severe fetal asphyxia was plainly due to the repeated doses of morphine. There was one stillbirth in the untreated hundred and one baby that died in the first twenty-four hours. In the scopolamin series there were two stillbirths, and one death of a child of an eclamptic.

The average duration of labor in these hundred primiparæ was sixteen hours, as against eighteen hours in the untreated hundred. The third stage averaged thirteen minutes as against sixteen minutes in the untreated hundred. Hence there was no prolongation of labor. The average duration of labor after the first injection was six hours. In general, the effect on the course of labor was a rather more rapid dilatation of the cervix than usual, followed by a delay in the advance of the presenting part at the outlet and especially on the perineum. There were seventeen forceps extractions, as compard with eleven in the untreated hundred primiparæ.

The few disadvantages of the treatment as observed by Harrar and MacPherson are ones that may be avoided by constant observation of the case. They count the fetal heart every fifteen minutes. The administration of the scopolamin and the memory test must be carried out with watch in hand and all the details of Krönig and Gauss followed methodically to obtain the greatest number of successful amnesias.

Closer attention than usual must be paid to the progress of labor and abnormalities promptly corrected as they arise.

Regarding the limitations of the treatment, in the ward service of a large hospital in only a fraction of the total admissions is scopolamin semi-narcosis feasible. The method is only a practical procedure for general practice in private houses when the finances of the patient permit the transfer of a complete working force to her room for the entire duration of labor.

Harrar and MacPherson conclude this is a valuable method of abolishing the woman's recollection of the ordeal of labor in from 60 to 70 per cent. of cases; and they believe in conscientious and painstaking hands, by strictly adhering to the described technic, the possible dangers may be foreseen and avoided.

At the same meeting A. J. Rongy, of New York, gave his experiences. According to Rongy's technic, treatment is begun only when the patient shows definite signs of active labor. The patient is then put to bed in a dimly lighted room and an initial dose of 0.00045 gm. 1/160 gr. scopolamin hydrobromid is injected intramuscularly. This is preceded by a hypodermic injection of ½ grain of narcophin. His procedure follows the lines of Harrar and MacPherson.

He treated 125 consecutive cases in the obstetric services of the Jewish Maternity and Lebanon Hospitals. In 104 cases or 83.2 per cent. there was complete amnesia with analgesia; in nine cases or 7.2 per cent. there was analgesia without amnesia; in twelve cases or 9.6 per cent. the treatment failed to produce the desired effects.

Rongy found that pain is less intense and apparently of a shorter duration, but found no alteration in the actual time of uterine contractions. The outward manifestations of pain, such as facial expression and outcry are markedly diminished. The average duration of labor in primiparæ in this series, figuring from the time of admission to delivery, was eight and one-half hours. The average time that the patients were under the influence of scopolamin was about six and one-half hours. The longest period that a patient was kept under was nineteen hours. The shortest period was one and one-half hours. The average number of injections was five, the highest number was twelve, and the lowest, one.

In Rongy's series 102 babies, or 81.6 per cent., cried spontaneously. In nineteen cases or 15.2 per cent. varying degrees of oligopnea were present. There were four cases or 3.2 per cent. of asphyxiated children. The total infant mortality was three deaths or 2.4 per cent. One was a premature infant with spina bifida. The second died from neanatorium and the third from subdural hemorrhage.

Labor had to be terminated artificially in fifteen cases or 12 per cent. In two patients the breech presented and delivery was accomplished by bringing down a foot. In thirteen cases forceps was used; two medium and eleven low. One case was nephritic with marked edema, and it was deemed advisable to terminate labor quickly. In three cases forceps was indicated because of persistent occipitoposterior positions. In one case labor was terminated because of an existing severe cardial condition. In three cases labor was prolonged, the fetal head apparently meeting with some obstruction at the pelvic outlet. In six cases labor was terminated on account of a tedious second stage.

It was found that the patient must be constantly kept under the influence of the drug. Should she at any time during the course of the treatment partially regain consciousness, she will not only recollect the pain which she actually experienced, but will reconstruct the entire progress of labor.

Ether was the anesthetic used where artificial delivery was performed. The patients were very quickly narcoticized, and consumed very small quantities of ether.

With the possible exception of kidney complications, Rongy found no contraindications for the use of this method.

Endocarditis was present in two cases with no untoward effects.

These patients are physically little affected by labor. The exhaustion that usually accompanies labor in primiparæ is entirely eliminated. They usually appear very calm the following day, for instead of having passed the previous day in pain and wakefulness, they had gone through labor in a state of semi-consciousness without any undue physical exertion. There were ninety-two primiparæ in Rongy's series and in his experience this treatment is best suited to first labors.

Magnus A. Tate, of Cincinnati, has employed scopolamin-narcophin in nine cases. As a result he is not enthusiastic (*Lancet-Clinic*, Oct. 24, 1914). He says that his "group of cases is not large, the surroundings were not ideal to follow treatment, the dosage and method as laid down by the Freiburg Clinic were not carried out strictly, so I do not feel as some, that we should wholly denounce the method and that there is nothing good in it. To say it reduces the fetal mortality seems to me, of course, idle talk, and that it makes a painless childbirth without deleterious effects in 70 to 85 per cent. of cases is hard to believe."

He is of the opinion that "the profession at large will never adopt this treatment, because it is complicated, requires too much time and is dangerous if not used properly; that it will receive from American obstetricians, who have the opportunities and facilities, a fair and impartial trial; that with proper cases, ideal surroundings, the case in the hands of a competent obstetrician, many women may be carried through their confinement with little pain, whether they use the Freiburg treatment or resort to our usual remedies as now employed."

MEDICAL PUBLICITY, THE ONLY WAY TO BREAK MEDICAL MEDIAEVALISM.

LEONARD KEENE HIRSHBERG, A. B,, M. A., M. D.
PRESIDENT OF THE AMERICAN ASSOCIATION OF CLINICAL RESEARCH.
Baltimore.

If this medical society runs true to form, the young doctor who wisely and uprightly flaunted the fossilism of medical publicity in the face to announce widely and promptly in the daily press a method to prevent poisoning by bichloride of mercury will be censured or expelled from membership among such "conservatives" for his announcement through a non-exclusive journal of his useful discovery.

The mock-sincerity and unconscious hypocrisy of alleged medical leaders, medical societies and medical experts and association officers against this use of the newspaper and popular magazine has a mediaeval pathos in it that would be amusing if it were not destructive of the dissemination of knowledge.

Dr. Gould, the distinguished physician and honest editor, is one of the few candid writers, thinkers, and scientists who seems willing to give this ancient survival of secrecy, clannishness and occultism a deathblow. I refer to the foolish New English and Puritanical contention so dear to doctors of a certain class that medical news, no matter how important

*Presidential address read November 5, 1914, before the American Association of Clinical Research at the sixth annual meeting, Baltimore, Md.

or how interesting to the general public, should always have its first presentation in the official organs of the profession. They insist that any doctor who procures or even permits announcement of his achievements or discoveries in the daily papers is a sinner beyond compassion or redemption.

Disagreeing utterly with these survivals from another age, and realizing that the war against disease neither is nor ought to be a mystery carefully guarded from the uninitiate, Dr. Gould says the great majority of physicians first learn from the lay press of new things affecting their work. They do look for the full and accurate details later in the technical journals, but "if the facts were not mentioned elsewhere they would come to the attention of only those few men who happen to see a particular journal." Then comes a magnificent illustration of the truth: "This is the way that Mendel's great discovery was lost for over twenty years."

It was, indeed, and for a good deal over twenty years —for thirty-six, to be exact. For it was in 1865 that Mendel wrote the essay on hybrid peas which now ranks among the greatest three, or four, contributions ever made by one man to science. In the most orthodox and "ethical" manner it was first printed—a year later —in the "transactions" of the society in Brünn for the study of the natural sciences to which he belonged. There, if it had a single reader, not one of them even glimpsed its importance, and it remained buried from the world until 1900, when some strange chance brought it at about the same time to the attention of three men who could appreciate its worth and meaning.

Had Mendel's paper, or an intelligent abstract of it, appeared first in a real newspaper with a real circulation, it certainly would have come to the notice of the group headed by Darwin, the theory of evolution would have been at once modified, and a vast amount of subsequent work in this field would have been done in a clear light, not a confusing fog of error as to the exact nature of cross matings.

A small press dispatch, however, which states briefly that Dr. Simon Flexner, of the Rockefeller Institute, has perfected a meningitis serum, or that Dr. Rufus Cole has made a successful pneumonia serum, will reach the eyes of millions of sufferers, and no doubt nearly two hundred thousand physicians, nurses, hospital authorities and scientific investigators.

Save only for infrequent minor errors, not a sane justification exists other than selfishness, clannishness and insularism for aged authorities and slowly-moving medical men to object to the newspaper, rather than the class journal of insignificant circulation, imparting the fact universally.

The press, as is shown in the instance of the radium and the Friedmann fiascoes, does more good when it spreads forthwith and at first hand all medical announcements, good, bad and indifferent, than when it withholds news by virtue of a secret agreement with some self-appointed medical committee or society. Even when an announcement with glaring errors is thus sent broadcast the press, rather than before the eyes of only sixty thousand busy physicians—most of whom neglect to read the articles, to understand them or to have a layman rub it under their noses—it does only good.

It will be confessed by most honorable, broad-minded physicians that articles appearing in medical journals are rarely if ever disputed, denied, corrected, or their authors brought to book. Rewrite, however, 75 per cent. of these technical articles into plain English and publish them in a newspaper or a popular magazine, when lo! all the doughty man hunters, crusaders and jealous medical competitors, under the false armor of the public weal and the universal uplift, will sail in willy nilly, "shocked and scandalized" at such unethical conduct. The culprit will be haled before the chairs, the grand warden will show him his heinous offences, and he will be impolitely kicked out of Medical Holy of Holies.

Dr. William Todd, at a recent medical society meeting held for the purpose—and with absurd success in the city question—of making all the city newspapers agree to publish no medical or near medical information that was not subject to said medical society's committee on publicity, arose and said:

"It is very embarrassing to the men of the medical profession, many of whom are professors, to have to learn first from their patients of new methods of diagnosis, of new treatments, of new procedures, new germs and new drugs."

Thus innocently and with uncommon naivete he exposed some of the underlying keenness of the "thayeristic" anti-publicity crusade. It is less the open stand for the public welfare as for an unconscious, deeply hidden embarrassment that others may learn a new truth months beforehand.

Some of the most noteworthy blows against medical smug is, and surgical superstitution have been able to reach the vitals of the medical profession only through the lay press and the popular magazines.

An article last year in one magazine tabulated a list of valuable and accepted present-day medical usages, none of which scoffed at, abused, and at first rejected, originated with poorly educated, unschooled, non-medical men. One of these, to wit, the use of the electric fan in pneumonia, first suggested by Mr. Fred. A. Walker, editor of the Washington *Times*, has undoubtedly saved as many lives as the new nameless mixture combined with bichloride of mercury.

Indeed, of some of the persistent superstitutions of physicians, such as calling fifty-seven different disorders form flat feet to curvature of the spine by the delusive misnomer "rheumatism"; the use of such absurd names as "catarrh," "uric acid excess," "nervous indigestion"; the wrong use of alcohol as a stimulant; the mistaken treatment of hemorrhages with ergot; the curious belief that asafoetida and valerian have medicinal values; if all of these facts were exploded in newspapers with their millions of readers instead of in medical periodicals rarely read even by their few busy subscribers, the errors and exaggerations—which are as common and less often corrected in medical journals—which inevitably creep into all printed pages would be more than over-balanced by the accuracies.

Thus shall the press the people's health maintain,
Unawed by ethics, unbribed by pain;
From medical facts, not committees, knowledge draw,
Pledged to the people, be not the doctors' paw.

Then mightiest of the mighty means,
On which the arm of progress leans,
Man's noblest mission to advance,
His ills assuage, his weal enhance,
His rights enforce, his wrongs redress—
Mightiest of medicines is the press.

Cerebral Hyperemia.

Tinct. Belladonnæ	gtt. x
Fl. ext. Ergotæ	f. ℥v
Potassii Iodidi	℥vij
Syr. Amygdalæ	f. ℥ij
Aquæ	ad. f. ℥iv

M. Sig.: One teaspoonful in water after meals and at bedtime. —BLAIR.

Obstetrics and Gynecology

Transference of Pain in Genital Diseases.

Diseases of the female genitalia are accompanied by reflex pains in various locations, says J. B. Porchownik (*Monat. f. Geburt. u. Gyn.*, 1913, xxvii, 719). The sympathetic plexuses of the uterus and adnexa are located in the latter. The reflex pains in the so-called endometritis dolorosa are especially severe, but they also occur in oöphoritis, retroflexion of the uterus, etc. These pains are caused by anastomoses between the plexus of the body of the uterus and the first and second spinal nerves from the sacral plexus.

Pain in the bladder, the so-called cystospasm, and in the kidneys and gall-bladder are also explained by anastomoses of the sympathetic plexuses with each other and with the plexus of the body of the uterus. This also gives rise to the reflex cough (uterine cough of Auvarel). Attacks of neuralgic pain in the region supplied by the trifacial are interesting. Only certain areas of the skin of the face are painful, the so-called hyperalgesic zones. The irritation of the genital organs is transferred through the solar plexus to the cervical plexus of the sympathetic, and from there to the posterior roots of the spinal nerves and the trifacial.—(*Surg., Gyn. & Obst.*, April, 1914.)

Management of Interior of Uterus in Post-Abortal and Post-Partum Infection.

J. O. Polak, of Brooklyn, shows why every case of post-abortal and post-partum infection should be studied carefully and treated according to the type of infection and the duration of pregnancy; avoiding the use of the curette or any intra-uterine examinations during the acute stage of the infection, except in abortion cases of less than seven weeks when the uterus is retroflexed. (*L. I. M. J.*)

"A study of nearly 2,000 cases of puerperal infection has demonstrated that the endometrium should never be curetted in streptococci infection and that curettement of the placental site is a potent cause of thrombo-phlebitis of the pelvic veins." The author has also observed that peritoneal and parametrical complications are rare in cases in which the interior of the uterus has not been disturbed by digital or instrumental exploration.

"Nature protects the organ against the invading organisms by the formation of a definite layer of leucocytes and small round tissue cells, which are deposited between the infected area and the underlying normal tissue." He states that the use of the curette in these cases destroys this protective barrier and spreads the infection and he advises as a more satisfactory means of securing uterine drainage, Fowler's position and uterine contraction by means of pituitrin and ergot in full doses, also the use of ice-bags over the uterus.

In a report of 104 cases of puerperal infection, the author states that a hæmolytic streptococcus was recovered thirty-four times; a streptococcus of the non-hæmolytic type ten times; pure streptococci five times; combined growths of streptococcus and staphylococcus ten times; in combination with colon bacillus five; saprophytic bacillus five, and with streptococcus and colon bacillus ten times. Of this series there were three fatal cases, one failing to show any organism in the blood, in another the streptococcus brevis was found and in the third staphytolococcus aureus. None of the 34 cases showing a hæmolytic streptococcus were curetted.—(*Surg. Gyn. & Obst.*, No. 4, 1914.)

Sitting Posture in the Puerperium.

W. G. Gordon of Balimore believes the sitting posture is a prophylactic measure. He says infections during the puerperal period can be divided roughly into two groups; those in which the infection has not extended as far as the peritoneum, and those in which the peritoneum is involved.

Drainage is the essential therapeutic measure in the first group. The surest way to procure drainage is to take the patient out of bed and place her in a comfortable chair. The sitting posture as the most important part in the treatment in these cases, and in the majority of instances is the only treatment to be used. Many physicians are timid about taking a patient out of bed who is running a high temperature. As a fact, the higher the temperature is the more erect the patient should sit and the longer time she should be kept up. In other words, when drainage is most demanded, improve the possibilities of drainage to the utmost.

In the second group of puerperal infections, or those in which the peritoneum is involved, a seemingly different problem is present, but the same principle holds good. In septic peritonitis, due to an infection from any source, the first step in the modern treatment is to put the patient in a sitting posture. The efficiency of the sitting position in the treatment of peritoneal infections originating above the brim of the pelvis has been on trial so long that its value is no longer doubted. If the sitting posture has been found beneficial in infections of the peritoneum originating above the brim of the pelvis, Gardner believes it reasonable that it ought to be even more efficient in the infections that begin within the pelvis. As a matter of fact, any form of puerperal infection is benefited by putting the patient in the upright position.

In those cases in which the peritoneum is involved there is much less tendency for the infection to spread to the general peritoneum. The localized infection, however severe, can, as a rule, be successfully dealt with, either by waiting for resolution or by drainage, according to the changes that take place as a result of the infection.

In those cases in which the peritoneum is not involved, drainage, the only remedy of value, is promoted. In short, the actual time of continuous confinement to bed after a normal labor can be materially shortened with distinct advantage to the patient; the patient must be made to understand that the early getting up means sitting quietly in a comfortable chair and that she is not out of the charge of the physician; regular exercises that throw into use the muscles of the abdominal wall are of undoubted value; retrodisplacement, prolapse of the uterus and cystocele do not result from arly sitting up postpartum; lacerations of he perineum and injuries to the lower segment of the uterus are not contraindications for early rising after labor.—(*Maryland Medical Journal*, April, 1914.)

Narcosis and Anaesthesia in Childbirth.

H. Fuchs thinks circumstances combining to establish the use of chloroform in normal labor to establish narcosis are: (1) Use of minimal quantities of the anæsthetic; (2) remarkably quick awakening; (3) slight or no after-effects.

Tolerance of chloroform during labor is the result

of (1) increased gas exchange in the lungs; (2) increased driving power of the heart and (3) rapid escape of poison through bleeding.

In the opinion of the writer there is an important sphere of usefulness for chloroform in normal delivery; namely the so-called narcosis *à la reine*—chloroform inebriation. This is brought about by careful administration to maintain the stage of hypalgesia or analgesia which normally precedes the stage of excitement. The success of the properly conducted chloroform inebriation is of such a nature that not only are the pains not felt, but usually there is a loss of memory of the severe pains.

Ether, as a help in labor, is far superior to chloroform. It diminishes the pains far less and interferes with the abdominal efforts hardly at all.

Pantopon given hypodermically, effects psychic calm and lessens the pains felt without any noticeable deleterious influence on the frequency, intensity and duration of the pains. Its effects on the child, however, may result in deep somnolence of the new-born.

The analgesic action of scopolamine-morphia is peculiar in that the pains are perceived at the moment but leave no memory picture—(*Univ. Med. Rec.*, No. 4, 1913.)

Ninhydrin Reaction in Urine.

After referring to Warfield's paper (*J. A. M. A.*, Feb. 7, 1914, p. 436), Chaillé Jamison, New Orleans (*J. A. M. A.*, April 4), reports a series of experiments to test the reactions reported by Warfield. He finds that whenever the urine is strongly acid in pregnant women, the ninhydrin test gives a negative result. In ten non-pregnant women suffering from various surgical conditions the urines gave a distinct positive reaction, as was also the case in four other non-pregnant women and two men, one of the latter suffering from nephritis. The urines of four healthy men were tested on another day and all gave negative reactions. "In view of these results it was thought that the amino-acids present might be accounted for by the action of the bacteria on pus and other albuminous matter present in the urine, especially in that of women. To avoid this, the urine was thoroughly boiled as soon as voided, all material used in the tests was sterilized by boiling and the tests were set up under aseptic precautions. Under these conditions ten urines from non-pregnant women suffering from various surgical conditions and two from known pregnant women were tested. At the end of twenty-four hours the dialysates from eleven of them showed positive reactions with a freshly prepared solution of ninhydrin, and one of them a negative reaction. The case giving a negative reaction was one of carcinoma of the breast." His conclusions from the experiments so far are: "1. After dialyzing the urines of pregnant women the dialysate always gives a positive reaction to ninhydrin. 2. After dialyzing the urines of non-pregnant women, the dialysate frequently gives a positive reaction to ninhydrin; occasionally, under the same conditions, the urines of men give positive reactions."

Ringworm.

℞ Camphor 3ij
Spiritis vini gallici 3iv
Acidi picrici ..... gr. vij

Sig.: Inflammable. To be painted all over the scalp twice daily.

Clip the hair close and wash the head twice a week.

—*British Medical Journal.*

The Physician's Library

Anesthesia. By James T. Gwathmey, M. D. Anesthetist to the New York Skin and Cancer and Columbia Hospitals and St. Bartholomew's Clinic; President of the American Association of Anesthetists; in Collaboration with Charles Baskerville, Ph. D., F. O. S., Professor of Chemistry and Director of Laboratories in the College of the City of New York. Cloth. 945 pages, 319 illustrations. $6.00. New York: D. Appleton & Co., 1914.

It is eminently fitting that the leading anesthetist in the country should present an exhaustive and authoritative work on anesthesia. Not only does he draw from his own rich experience, but he has as associates such men as Gatch, Sutton, Mitchell, Prinz, Frink, Elsberg and Bainbridge. The resulting volume will go far toward solving the anesthetic problems of the practitioner, for every phase of anesthesia, from the history of each agent to the most minute details to administrative technic has been thoroughly covered.

To single out particular points for especial mention is difficult. Gatch's chapter on Rebreathing is of the greatest value, as are the sections devoted to the most commonly used of the general and local anesthetics. Mitchell and Prinz handle local anesthesia well, although we would have been glad to have seen more on this most important and rapidly increasing means of anesthetic procedure.

Nitrous oxid and oxygen, with the various technic and different apparatus is well covered. In short, one would be a captious critic to find fault with this splendidly ordered book. It is one which will appeal with equal force to anesthetists and practitioners.

Practical Hygiene. By Charles Harrington, M. D., late Professor of Hygiene in Harvard University. Fifth edition, revised and enlarged by Mark W. Richardson, M. D., Secretary to the State Board of Health of Massachusetts, in collaboration with the following officials of the Board; W. H. Clark, Chief Chemist; X. H. Goodnough, Chief Engineer; William C. Hanson, M. D.; Hermann C. Lythgoe, Chief Analyst of Food and Drug Department, and George H. Martin. Cloth. 933 pages, with 125 engravings and 24 plates in colors. $5.00 net. Philadelphia and New York: Lea & Febiger, 1914.

The former excellence of this well known book is enhanced by the addition of the writings of several new contributors, all of whom are specializing in practical health work. The book is one which meets the problems confronting state and local health officials and consequently is of real value to such men. It can be sincerely commended as one of the best volumes of its kind in existence.

Medical Diagnosis. By James M. Anders, M. D., Professor of the Theory and Practice of Medicine and of Clinical Medicine, and L. Napoleon Boston, M. D., Professor of Physical Diagnosis, Medico-Chirurgical College, Philadelphia. Second edition thoroughly revised. Cloth. 1248 pages, 500 illustrations, some in colors. $6.00 net; half morocco, $7.50 net. Philadelphia and London: W. B. Saunders Company, 1914.

"None read it but to praise it," very aptly tells the story of this book. It stands at the forefront of volumes of its kind because of its unusual value. The

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OF

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H. SHERIDAN BAKETEL, A.M., M.D.
EDITOR
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authors have caught the physicians' viewpoint and have made the most of it. Consequently they give the details and then illustrate them, not by words but by pictures. The illustrations double its usefulness and in this regard put it quite in a class by itself. The work is the result of the most painstaking and careful observations and the findings are set down in a simple, accurate and direct style *sans* needless details.

The Practice of Surgery. By James Gregory Mumford, M. D., Lecturer on Surgery in Harvard University, Surgeon to the Clifton Springs Hospital, N. Y., etc., etc. Second edition. Cloth. 1032 pages, 683 illustrations. $7.00. Philadelphia and London: W. B. Saunders Company, 1914.

We commented very favorably on the first edition of this book several years ago and we can commend the second edition even more highly, not that there have been material changes, for they are few, and the additions only bring the volume up to date. But we are impressed with the ensemble, the arrangement of subjects, which is out of the ordinary, the discussion of surgical essentials often neglected by writers and the personal touches so indicative of the author. It is with deep regret that we note the passing of this gifted surgeon. Those who are familiar with his surgical memoirs; One Hundred Surgical Problems and A Doctor's Table Talk will lament the fact that the brilliant mind is forever stilled. Mumford's books will remain as a lasting monument to his skill as a surgeon and his genius as a writer.

Blood Pressure: Its Clinical Applications. By George W. Norris, A. B., M. D., Assistant Professor of Medicine in the University of Pennsylvania. Cloth. 372 pages, with 98 engravings and 1 colored plate. $3.00 net. Philadelphia and New York: Lea & Febiger, 1914.

With the further recognition of the importance of blood pressure in the practice of medicine, Dr. Norris does well to bring out this timely volume. Much experimental and clinical material has been included, resulting in a well balanced presentation of the latest scientific information regarding blood-pressure and its clinical applications. Norris gives us a complete and authoritative work, in which some excellent illustrations assist in understanding the text.

Genito-Urinary Surgery. By J. W. Thomson Walker, M. B., C. M., Ed., F. R. C. S., Eng; Hunterian Professor of Surgery and Pathology in the Royal College of Surgeons of England, etc. Cloth. 880 pages and 324 illustrations, of which 24 are in colors. New York: Funk & Wagnalls Company, 1914.

The publishers have done a great service to American physicians by bringing out this splendid volume on the surgical diseases and injuries of the genito-urinary organs by one of England's best known surgeons. Those of us who have seen him operate at Hempstead General and St. Peter's Hospitals, London, fully appreciate his unusual skill.

The book is divided into 11 parts and the subjects treated are the kidney, ureter, bladder, urethra, prostate, seminal vesicles, testicles, tunica vaginalis, spermatic cord, scrotum and penis.

Each is treated thoroughly, the writer giving his own ideas and the opinions of the leading authorities of the day.

One of the features of the book is an excellent presentation of the pathology of every condition. This differs from many other works and it is made doubly valuable by giving living, rather than post mortem pathology.

No attempt has been made to take up venereal diseases. The entire book is devoted to an exhaustive consideration of the surgical problems, which come to the attention of the urological surgeon.

Mr. Walker has written a treatise on this subject which will stand the acid test of close professional scrutiny and will give him as secure a position as a writer as he already possesses as a surgeon.

Typographical excellence and a wealth of fine illustrations speak much for the publishers.

Practical Bandaging. By Eldridge L. Eliason, M. D., Assistant Instructor in Surgery in the University of Pennsylvania. Cloth. 125 pages and 155 illustrations. $1.50 net. Philadelphia and London: J. B. Lippincott Company, 1914.

Students will find this little book of great value in studying the art of bandaging, for it is a real art. The good bandager is a *rara avis* among physicians. Close attention to the text and pictures in this book will prove of material aid to him who would perfect himself. Roller, elastic, plaster of Paris and miscellaneous bandages and adhesive dressings are fully discussed and sufficiently illustrated.

Diseases of the Nose, Throat and Ear. By William Lincoln Ballenger, M. D., Professor of Laryngology, Rhinology and Otology in the College of Physicians and Surgeons, Chicago. Fourth edition, thoroughly revised. Cloth. 1080 pages, with 536 engravings, mostly original, and 33 plates. $5.50 net. Philadelphia and New York: Lea & Febiger, 1914.

The medical profession has done Dr. Ballinger the honor to demand four editions in six years, a well deserved tribute to the practicability of his book. This edition has been entirely revised, largely rewritten, with 100 new pages and many new plates. The important feature will be found in the chapters on the Labyrinth. Great labor has been bestowed in marshalling the facts and formulating them for teaching purposes. Thirteen original colored plates illustrate the physiological and pathological manifestations of nystagmus. Among other new matters are the description of Mosher's fronto-ethmoid operation and the use of autogenous vaccines in the treatment of hay fever. The section on functional tests of hearing and otosclerosis have been brought up to date. Vaccine therapy has been revised, and the His leukocyte-extract therapy is given in detail. It forms a distinct advance in the treatment of certain forms of infectious diseases, especially of the nasal sinuses and meninges. The use of salvarsan in the treatment of syphilis of the brain and auditory nerve is described with great fulness. The book is extremely useful.

A Text-Book of Pathology. By J. George Adami, M. D., F. R. S., Professor of Pathology in McGill University, and John McCrae, M. D., M. R. C. P. (London), Lecturer in Pathology and Clinical Medicine in McGill University. Second edition, enlarged and thoroughly revised. Cloth, 878 pages, with 395 engravings and 13 colored plates. $5.00 net. Philadelphia and New York: Lea & Febiger, 1914.

(*Continued to p.* 22)

(*Continued from p. 20*)

The first edition of this book is speedily followed by another which is bigger and better than the original. No pathologists are better fitted to turn out a meritorious work on pathology than the distinguished authors of this work and they have performed their labors with great credit. The pathological advances of the past two years are to be found in the new edition. A chapter on "The More Important Infections and Their Prominent Features" has been added, the classification of tumors has been simplified, the recent work dealing with toxins and the effects of "split products" is included; a syllabus has been placed at the beginning of each chapter; and the volume is completely cross indexed. This edition contains over one hundred additional pages and 93 new illustrations, which will attest to the value of the edition.

Disease of the Skin, Including the Acute Eruptive Fevers. By Frank C. Knowles, M. D., Instructor in Dermatology in the University of Pennsylvania; Clinical Professor of Dermatology, Women's Medical College of Pennsylvania. Cloth, 546 pages, with 199 engravings and 14 plates. $4.00 net. Philadelphia and New York: Lea & Febiger, 1914.

The author has condensed much helpful dermatological information in a limited space and with the aid of many illuminating photographs has produced a meritorious volume. The symptomatology is explicit and the treatment short, terse and ample. The physician who procures this book will read it with pleasure and profit.

A Manual of Diseases of the Nose and Throat. By Cornelius G. Coakley, M. D., Clinical Professor of Laryngology in the College of Physicians and Surgeons, Columbia University, New York. 5th edition. Cloth. 615 pages, with 139 engravings and 7 colored plates. $2.75 net. Philadelphia and New York: Lea & Febiger, 1914.

This useful and instructive manual touches upon the pathology, simplifies the diagnosis, and emphasizes those methods of treatment which are most practical. Its statements are brief and clear, and its illustrations convey valuable supplementary information. This book demonstrates the practical working points indispensable in the every-day routine of the busy physician.

Progressive Medicine. Vol. XVI, No. 3, Sept., 1914. Edited by H. A. Hare, M. D., of Jefferson Medical College. Paper. 340 pages. $6.00 per year. Philadelphia and New York: Lea & Febiger, 1914.

The contents of this number includes: diseases of the thorax and viscera (W. Ewart); dematology and syphilis (W. S. Gottheil); obstetrics (E. P. Davis); diseases of the nervous system (W. G. Spiller). The subjects are carefully reviewed by the authors and are well planned reviews of the progress in the topics considered.

A Message of Health. By Russel C. Markham, M. D. Cloth. 123 pages. 75 cents net. Philadelphia: Boericke & Tafel. 1914.

This is a book for the home, intended to teach proper living. It shows how to eat, drink and sleep on rational lines and the author believes that all who carry out his precepts will reach an exalted plane.

(*Continued to p. 24*)

(*Continued from p. 22.*)

Collected Papers From the Research Laboratory of Parke, Davis & Co. Vol. 2.

There are twenty-two reprints in this volume, all of them from standard American and foreign professional publications. They clearly show the very high grade work which is being carried out in the laboratory. The work is well worth the serious attention of the progressive physician.

A Text-Book of General Bacteriology. By Edwin O. Jordan, Ph. D., Professor of Bacteriology in the University of Chicago and in Rush Medical College. Fourth edition. Cloth, 647 pages. Fully illustrated. $3.00 net. Philadelphia and London: W. B. Saunders Company. 1914.

This edition is better than the third edition, which we reviewed more fully in 1913. Dr. Jordan has brought it up-to-date, adding a new chapter on filterable viruses and making many valuable suggestions in other chapters. The book is one of the best of its kind in the English language.

Diseases of Bones and Joints. By Leonard W. Ely, M. D., Associate Professor of Surgery, Leland Stanford Junior University. Cloth. 220 pages. 94 illustrations. $2.00. New York: Surgery Publishing Company. 1914.

This little work is for the general practitioner, and it lays down broad general principles, with the evidence upon which they are based, and demonstrates how these principles may be applied. Anatomy, physiology and pathology of bones and joints, acute and chronic arthritis of various types, ankylosis, diseases of the shafts, acute osteomyelitis, chronic inflammations in the bone shafts and new growths in bone are considered. The illustrations give added value to the book and the marginal side-heads, printed in contrasting colors, permit of ready reference.

Report of the Department of Pathology and Clinical Psychiatry, Central Indiana Hospital for Insane, 1911-13. Indianapolis: The State Printer, 1914.

Many reports, of great interest to the neurologist, psychiatrist and pathologist are found in this well printed volume. Its careful preparation reflects credit on Dr. George F. Edenharter, superintendent of the hospital and his staff.

International Clinics. Vol. III, 24th Series. Edited by H. W. Cattell, A. M., M. D. of Philadelphia. Philadelphia and London: J. B. Lippincott Company. 1914.

Diagnosis, treatment, medicine, electrotherapeutics, surgery, child welfare and medical problems are the subjects treated in this number. The articles are short and to the point. They are practical and interesting and meet the problems which arise in the daily work of the general practitioner. Not the least valuable contribution is a description by P. G. Skillern, Jr., of John B. Deaver's surgical clinic at the German Hospital, Philadelphia, with case reports and illustrations.

Erythema Intertrigo.

The following may be used as a dusting powder.

Hydrarg. Chloridi Mitis	gr. xx
Lycopodii	ʒij

M. Sig.: Dusting Powder.

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Adonidini	gr. iiss
Ammonii Carbonatis	gr. xlv
Camphoræ	gr. xv

M. Div. in pulv. (vel. caps. gelat.) No. xxx.
Sig.: One three times daily.

The Traumatic Neurosis.

Tom A. Williams of Washington shows the cause of this misnomer to be purely psychic, derived from a false notion of the patient which induces depressing emotions which disturb both the bodily health and life relation. A clear illustration of the mechanism is that of the "conditioning" of the gastric reflex of dogs by psychological stimuli whether these are pleasurable or painful. The removal of the extraneous suggestion would remedy the neurosis but for the fact that memory maintains its actions. The mental content must be modified at its foundation, and this requires considerable analysis of the patient's trends, hence the complete failure of such naïve procedures as reassurance and suggestion.

Law suits and malingering, so often interwoven with these cases, have created misunderstandings, but indemnity is not necessarily curative even of the malingerer. A case which lasted seven years after receiving heavy damages is reported.

In the complicated case, proper psychological reconstruction, made possible by clear analysis, inevitably cures, as the mechanism of neurotic disturbances after accidents differs in no way from that we find when there has been no accident at all. Furthermore, its nature is not of a complexity beyond the understanding of a layman, so that its principles can readily be grasped when presented in court by an expert witness who really understands them.—(*Am. Jour. Med. Sci.*, Oct., 1914.)

Treatment of Placenta Previa.

Since 1891, in the service of the New York Lying-In Hospital, there have occurred 470 cases of placenta previa, and the operation of cesarean section has been performed for this condition nineteen times by six different operators, all since 1905. The situation of the previa was central in nine cases, marginal in five cases, and no statement as to situation was made in the history in five cases; no case was more than two fingers dilated; all had had severe hemorrhages before entrance into the hospital, and in all it was a matter of rapid delivery being considered advisable; the patients varied from para-i to para-xiv; the youngest was eighteen and the oldest, thirty-eight. As to results: of the nineteen cases operated upon, one mother died, a maternal mortality of 5.3 per cent.; two children were still-born, and three died before leaving the hospital, two on the first day, and one on the ninth, a fetal mortality of five, or 26 per cent.

It will be seen, then, remarks Ross McPherson, that in this series the maternal mortality is cut down by about two-thirds of the usually accepted mortality, whereas the fetal mortality is cut almost in half. While the number of cases is too small to more than point the way, he believes, that the indication is clear. and that when one encounters a primipara with a placenta previa either marginal or central, or a multipara with a central placenta previa in either case where the cervix is rigid or undilated, whether or not there is pelvic disproportion, provided the child is viable and the mother offers the ordinary safe operative risk, that cesarean section holds out a better chance of saving the lives of both mother and child with fewer complications than any other method of delivery, always provided that the operation is performed by a competent and experienced operator and amid suitable surroundings.—(*Amer. Jour. Obst.*, Dec., 1913.)

Aid For Belgian Physicians.

An American fund for Belgian physicians has been started by Dr. H. Edwin Lewis, of New York, and an appeal is made to the profession throughout the United States to aid these afflicted colleagues. The committee includes the following physicians: Wm. S. Bainbridge, New York; H. Sheridan Baketel, New York; Otho F. Ball, St. Louis; J. Wallace Beveridge, New York; Louis F. Bishop, New York; Samuel H. Brown, Philadelphia; A. S. Burdick, Chicago; W. P. Carr, Washington; Henry W. Coe, Portland, Ore.; David M. Cowie, Ann Arbor; T. D. Crothers, Hartford, Conn.; Howard Crutcher, Roswell, N. M.; Charles J. Drueck, Chicago; Chas. W. Fassett, St. Joseph, Mo.; Samuel G. Gant, New York; Bayard Holmes, Chicago; John B. Huber, New York; Smith Ely Jellife, New York; LeGrand Kerr, Brooklyn; Bransford Lewis, St. Louis; Frank C. Lewis, New York; J. MacDonald, New York; H. O. Marcy, Boston; Ellice McDonald, New York; Douglas W. Montgomery, San Francisco; Robert Morris, New York; Wm. H. Porter, New York; Beverly Robinson, New York; C. E. de M. Sajous, Philadelphia; Parker Syms, New York; E. A. Vander Veer, Albany; I. W. Voorhees, New York; Ralph Waldo, New York; Claude L. Wheeler, New York; Orrin S. Wightman, New York; Reynold Webb Wilcox, New York; Henry S. Williams, New York, and Chas. E. Woodruff, New Rochelle, N. Y.

Contributions should be sent to the Secretary for the committee, Dr. H. Edwin Lewis, 18 East 41st street, New York. As soon as the fund reaches suitable proportions it will be turned over to the original Belgian Fund Committee for distribution among the medical men of Belgium.

Pluto Water in Metabolic Therapy.

Pluto water possesses, in addition to the properties of plain water, a mildly tonic effect upon the mucous membranes of the stomach, due to both its gases and its salts, and, owing to its water and its salts, it is also diuretic. It is exceedingly useful, when taken half an hour before meals, to cleanse the gastric membrane and to prepare it for the reception of food. It also serves to dilute and wash out waste material from the system through the kidneys. Patients will usually drink Pluto water who will not, or cannot, drink sufficient ordinary water. A glass taken an hour or two after a meal promotes digestion and helps remove the effete products from the blood. In fevers it is always useful, and should be given freely; and it often allays nausea and vomiting. In short, Pluto water has a distinctive place and value in metabolic therapy—a fact which is widely recognized and testified by the way in which it is used and prescribed by physicians everywhere.

Prophylaxis Against "Colds."

In the case of a great many persons who each winter suffer severely from "colds" even involving the smaller bronchi, one of the most successful means of guarding against such infections is the systematic use of Cord. Ext. Ol. Morrhuae Comp. (Hagee) during the winter season.

By means of this cod liver oil product, which is exceptionally palatable, the tissues, particularly the tissues of the respiratory tract, are increased in resisting power against microbic invasion, in which phenomenon, of course, is to be sought the explanation of the power of Cord. Ext. Ol. Morrhuae Comp. (Hagee) to reduce the likelihood of "colds."

The Advancement of Clinical Study.

The annual meeting of The Society for the Advancement of Clinical Study of New York, was held at the Academy of Medicine, November 18th, and officers were elected for 1915. This Society has for its purpose the maintenance of a bureau of information which will furnish to resident and visiting physicians definite information regarding the clinical facilities of the hospitals and laboratories of the City of New York. For this purpose a bulletin board has been installed at the Academy of Medicine in charge of a special clerk, and on this all hospital clinics, both medical and surgical, are posted daily. These facilities afford physicians an opportunity to witness operations and clinical demonstrations without resorting to extended inquiries at the various hospitals.

Medical Reserve Corps.

The New York Division of the Medical Reserve Corps, U. S. Army, held its annual meeting November 14. These officers were elected:

President, Reynold Webb Wilcox; vice-president, Howard Fox; secretary, Harold Hays; treasurer, H. Sheridan Baketel. Councillors—Henry C. Coe, J. Herbert Lawson, Walter M. Brickner, S. Meredith Strong, Thomas Darlington, Frederick N. Wilson.

The association is in a very prosperous condition and President Wilcox has laid out an interesting program for the winter.

Pain: Its Relief.

If ever direct methods are needed it is in the relief of pain. And the application of a direct method in pain embraces, of course, the administration of a reliable and effective anodyne—and such an agent should be free, to the greatest extent, from evil effects.

A product that answers these requirements of an anodyne is Papine (Battle). Its effect is prompt and positive and it possesses a minimum of bad effects. For these reasons Papine is entitled to first rank among pain-relieving agents.

Scarlet Fever.

To produce sweating in scarlet fever or measles with dryness of the skin and diminished reaction of urine try the following:

Tinct. Aconiti.....mxlviij
Liq. Potassii Citrat.....f. ℥iss
Spt. Aetheris Nitrosi.....ad. f. ℥iij
M. Sig.: One teaspoonful every three hours for an adult.

—Horr.

The Drug Products Co. Catalogue.

In a recently issued price list, the Drug Products Co. state that the market conditions arising out of the European war make it impossible to establish and maintain prices on a large number of products, more especially those containing drugs and chemicals imported from Germany. They are consequently obliged to withhol until more settled conditions occur, the publication and distribution of their complete price list and catalogue of pharmaceutical preparations.

In the interim, is presented to the trade and profession a list of selected and approved products of which they have provided a generous supply; while this stock remains unsold they will share their good fortune with their customers by not advancing prices.

They will be pleased to receive your usual orders for preparations not listed herein, with the assurance that your welfare will be scrupulously guarded and that their prices will be as low as consistent with the prevailing conditions.

Chronic Catarrhal Diseases.

Chronic catarrh never fails to indicate general constitutional debility. Local treatment is always desirable but for permanent results efforts must be directed toward promoting general functional activity throughout the body, and a general increase of systemic vitality.

The notable capacity of Gray's Glycerine Tonic Comp. in this direction readily accounts for the gratifying results that can be accomplished through its use in the treatment of all chronic catarrhal affections, but especially those of the gastro-intestinal canal and respiratory tract. The particularly gratifying features in the results accomplished by Gray's Glycerine Tonic Comp. are their substantial and permanent character. This is naturally to be expected since they are brought about through restoring the physiologic balance of the whole organism.

Corpora Lutea Now Available.

Physicians who have been desirous of prescribing Corpora Lutea, but have been unable to do so through inability of their druggists to supply it, will be glad to know that the manufacturers, Messrs. Parke, Davis & Co., have taken steps to secure sufficient quantities of the glands in future to meet the probable demands of the medical profession.

As is known, perhaps, to most physicians, Corpora Lutea is largely used to control the symptoms following the removal of the ovaries, especially in young women, and to relieve the nervous disturbances attending the natural menopause. Reports have appeared on its successful employment in the treatment of amenorrhea, dysmenorrhea, chlorosis and menorrhagia. It is supplied in desiccated form, in capsules of five grains each, equivalent to about thirty grains of fresh corpus luteum. Only the yellow granular material from fresh ovaries is used in its preparation, the remainder of the gland being discarded because of its lack of therapeutic value.

While comparatively a new product, there is sufficient evidence at hand to warrant the opinion of one writer who expresses the belief that "in Corpora Lutea we have a preparation that will be a blessing to womankind."

Senile Pruritus.

℞ Acidi sulphurici diluti.....mlxxv
Syrupi rubi idæi.....f℥j
Aquæ destilatæ.....q. s. ad ℥vj
Sig.: Tablespoonful every two hours.

—BAUMEL.

An Aid in Obstetrics.

In nearly all of my obstetric cases I give one Abbott's H-M-C (half strength) at the beginning of the second stage of labor, or after the pains begin to come strong and regular.

It saves suffering, stimulates and strengthens the pains, making them come a little farther apart toward the last, and thus allowing more rest to the patient and greater dilatation of the soft parts. I have never had one single unpleasant after-effect from the use of this tablet, and I have used hundreds of them. Later on in labor, if the forceps is needed and chloroform as well, you are just one point ahead by having given the H-M-C as it lessens the danger in giving chloroform and, besides, not nearly so much is required. One case was where two other doctors were present, and craniotomy was resorted to. The other case was of the same kind (craniotomy) and I had to do that by myself, the nearest doctor being twenty-five miles away. Both of these recovered nicely. One I have attended twice since in normal labor and the other once.

If 389 cases of obstetrics in ten years, without one single accident from the use of this preparation, is not sufficient for even a country doctor to be considered somewhat of an authority, I am egotistic enough to ask why.—Dr. JOHN RUSSELL SMITH.

(Abstracted, with slight revision, from an article appearing in *The Medical World* of May, 1914.)

Wood Alcohol.

There is an enormous amount of wood alcohol used in the trades—about 8,000,000 gallons per annum. About four million workers are more or less exposed to inhalation of it, and it has been shown by Tyson and Schoenberg to be exceedingly dangerous. Heretofore we have thought of wood alcohol as dangerous chiefly on the score of its effects when taken into the stomach, but it is also a very great menace when inhaled, in fact competent observers have shown that it is as injurious one way as the other. Legislation is urgently called for providing for better than ordinary ventilation in establishments handling the stuff and also for labels upon all articles containing it. Regulation has been strongly resisted by manufacturers, particularly those interested in the making of perfumes, into which deodorized wood alcohol enters largely.

To Determine the Presence of Pus.

The test for Rivalta's Reaction for Pus is performed as follows: A drop of the fluid to be investigated is allowed to fall into 50 c. cm. of distilled water to which one drop of dilute acetic acid has been added. If the fluid contains pus, a cloudy precipitate forms; in the absence of pus, the fluid remains clear. The test is especially useful in distinguishing exudates from transudates and in determining whether the albumin in urine is due to pus or not. A pyuria, even of slight grade, will give a positive reaction, while a purely nephritic alubuminuria will fail to do so.

Carcinoma of the Lip.

J. C. Bloodgood of Baltimore says that in about 200 recorded cases he finds the benign precancerous lesions have increased tremendously, especially in the past two years. Of 12 cases which must be looked upon as distinctly benign, and in which two years or more have elapsed since operation, there has not been a single failure to cure by early excision. In a group of 16 cases which may be looked upon as early cancer (malignant warts) there has been but one failure to cure; that is, the percentage of cures is about 96. In this case the local lesion, the malignant wart, involved almost the entire lower lip. There was a local recurrence due to incomplete excision. The percentage of inoperable cases is have elapsed since operation, we have the following also diminishing. When we consider the fully developed carcinoma of the lip in which five years or more figures:

Group 1. Excision of lesion on lip, only 7 cures, or 63 per cent. The failure to cure in 4 cases was due to metastasis to the glands beneath the jaw.

Group 2. Excision of lesion on lip and of the glands beneath jaw. In the cases in which the glands removed showed no evidence of metastasis there have been 20 cures, or 95 per cent. The one failure to cure was due to a local recurrence on the lip (again, probably, incomplete surgery). When the glands removed showed metastasis under the microscope the percentage of cures falls to 50 (6 cases). These figures, therefore, show that if men will subject themselves to proper surgical treatment for those lesions which precede cancer, their chances of a cure should be 100 per cent. Even in the early stage of cancer the proper excision of the local growth on the lip and removal of the glands of the neck should offer almost 100 per cent. Delay, however, with its increasing chances of metastasis to the glands, diminishes the probability of a cure.—(*Am. Jour. Med. Sci.* No. 1, 1914.)

At Proctor's Fifty-eighth Street Theatre.

The finest playhouse in the city of New York is a title given to Proctor's some few years back and the title stands to-day, for a finer building, devoted to amusement, does not exist in the State. This theatre houses the most complete and modern of performances. A show comprising superior vaudeville and photo-play brevities is given three times daily from 11 a. m. to 11 p. m. Monday and Thursday the entire bill is entirely changed so that not a hint of any act or picture seen before remains for comparison. The prices of admission are extremely low, running from 10 cents to 25 cents.

J. F. Mitchell says novocain is now recognized as the best and safest local anesthetic.

The transformation of fructose in the body is produced through the intermediation of methylglyoxal.

Medical Times

A Monthly Journal of Medicine, Surgery, and the Collateral Sciences

Vol. XLII., No. 12 NEW YORK, DECEMBER, 1914 Fifteen Cents a Copy One Dollar a Year

CONTENTS

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This is an excellent equipment for treating Hay Fever, Bronchitis, all colds, and in cases of effected lungs. Especially recommended in the treatment of Syphilis, as well as in all diseases of the respiratory organs. The treatment consists of ozone inhalation and at the same time a direct treatment of the system by high frequency currents.

Outfit consists of No. 1 Meyer High Frequency Apparatus, set of six vacuum electrodes, universal handle, connecting cord, highly insulated high frequency cord, ozone generator on stand, dilating bulb with tubing, nasal and mouthpiece and bottle of oil.

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A Physician's Endorsement of Holstein Cows' Milk

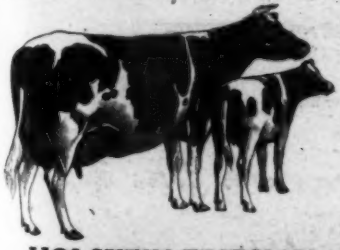
A well-known physician cites a case from his own practice:

"A. E. B., weight at birth, 8¼ pounds, a girl. After several weeks of persistent effort the breast was abandoned as the infant gave every evidence of retrogression.

"Weight at three weeks, seven pounds; baby put on sanitary mixed milk modified. Usual evidences of indigestion,—vomiting and regurgitation of large, hard, sour curds, constipation, stool containing large curds, sleeplessness, restlessness and hungry cry, were soon present and persisted until the age of seven weeks, when the baby was put on the milk of a young, fresh Holstein of Royal blood.

"Immediately progress became persistent—from a weight of seven pounds at seven weeks, this infant rose to fifteen pounds at sixteen weeks, stool normal, baby rosy, of firm flesh, happy and satisfied.

"During an enforced period of a few days, mixed milk was used with the aforementioned undesirable results; when pure-bred Holstein milk was resumed, the distressing symptoms faded away as by magic. This baby's mother is a firm believer in pure-bred Holstein milk."



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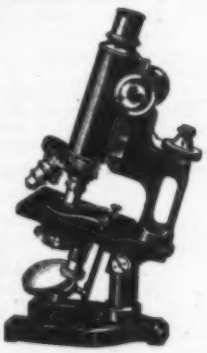

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Wanted—Interne physician for hospital in New York City. This position calls for a high-class single man. His personal habits and medical standing must be beyond question. References necessary. All communications confidential. Address, Hospital, care of The Medical Times. —9

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206 New Members Elected Year Ending May 1, 1914.

American Medico-Pharmaceutical League.—18th annual convention, May 24, 1915. The first medical society in America to admit pharmacists. All desiring to read papers are invited to forward titles. Dues, $2 per annum, initiation fee $1. Physicians, pharmacists and dentists eligible. Eugenie R. Eliscu, M. D., Treasurer, New York City; Samuel F. Brothers, M. D., Corresponding Secretary, 96 New Jersey Avenue, Brooklyn, N. Y.

Instrument Cabinet Wanted.—Physician desires to purchase a white enameled steel instrument cabinet, with at least three glass shelves. State make, condition and price. Dr. X., care Medical Times.

Good Advertising at Small Cost. The Want Advertisements.

A Soldier's Letter.

The following "field service post card" was received by Dr. H. Lyons Hunt of New York from Dr. Carleton Yates Ford, who has been on the staff of the New York Neurological Institute.

When war broke out he went to England and received a commission as lieutenant in the Royal Army Medical Corps and he is now stationed in Belgium.

The card is postmarked "Army Post Office, A—11 OC—14—41," but no intimation is given as to Dr. Ford's location.

NOTHING is to be written on this except the date and signature of the sender. Sentences not required may be erased. If anything else is added the post card will be destroyed.

I am quite well.

~~*I have been admitted into hospital*~~
~~*sick* } *and am going on well.*~~
~~*wounded* } *and hope to be discharged soon.*~~

~~*I am being sent down to the base.*~~

I have received your { *letter.* / *telegram.* / *parcel.*

Letter follows at first opportunity.

~~*I have received no letter from you*~~
~~{ *lately.* / *for a long time.* }~~

Signature only. Carleton Yates Ford

Date Oct 11 '14

Postage must be prepaid on any letter or postcard addressed to the sender of this card.]

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